



Co-funded by the COSME programme
of the European Union

“Supporting EU SMEs in the field of circular economy to participate in public procurement in Eastern Countries” (P2Green EST)

Deliverable 2.2

Report on Public Procurement market screening



Project: “Supporting EU SMEs in the field of circular economy to participate in public procurement in Eastern Countries” (P2Green EST)

Deliverable no: D.2.2 Public procurement market screening

Authors: Chamber of Commerce and Industry of the Republic of Moldova, Green Energy Cluster, Éa éco-entreprises, FADE

Submission date: November 2021

Dissemination level: **Public**

Revision history

Revision	Date	Author	Organization	Description
01				

Disclaimer

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

The content of this market screening represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the Executive Agency for Small and Medium-sized Enterprises or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains

Table of Acronyms

Acronym	Description
AA	Association Agreement
AfD	French development agency
ANI	National Integrity Authority
ANRE	National Energy Regulatory Agency
ANSC	National Agency of the resolution of complaints
API	Application Programming Interface
B2B	Business to business
BMZ	German ministry for economic cooperation and development
BSO	Business Support Organisation
CAPCS	Centre for Centralized public procurement in health
CC	Corruption Council
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CNA	National Anticorruption Centre
CPB	Central procurement bodies
CPV	Common procurement vocabulary
DCFTA	Deep and Comprehensive Free Trade Agreement
EA	European accreditation
EaP	Eastern Partnership
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECCP	European Cluster Collaboration Platform
EE	Energy Efficiency
EEN	Enterprise Europe Network
EESC	Eastern Europe and South Caucasus
EEU	Eurasian economic union
EFTA	European Free Trade Association
EIB	European Investment Bank
EPIRB	Emergency position indicating radio beacon
ESCO	European skills, competences, qualifications and occupations
ESPD	European Single Procurement Documentation
ESU 2035	Energy strategy of Ukraine until 2035
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GPA	WTO Government Procurement Agreement
GUAM	Georgia Ukraine Azerbaijan Moldova
IBRD	International Bank for Reconstruction and Development
ICPDR	International commission for the protection of the Danube River
ICT	Information and Communication Technology
IDNP	Personal identification code
IFC	International Finance Corporation
IFI	International financial institutions
IMF	International Monetary Fund
LPA	Local Public Administration

MENR	Ministry of ecology and natural resources
MGRES	Moldovskaya GRES
MIGA	Multilateral Investment Guarantee Agency
MinRegion	Ministry of regional development, construction, housing and municipal services
MLPS	Modernisation of local public services in the Republic of Moldova
MoE	Ministry of Environment
MoF	Ministry of Finance
MSFD	EU main strategy framework directive
MSW	Municipal Solid Waste
NATO	North Atlantic Treaty Organization
NBS	National bureau of statistics
NIF	EC Neighbourhood Investment Facility
NWMS	National waste management strategy
OCDS	Open Contracting Data Standard
OSCE	Organisation for Security and Cooperation in Europe
PAS	Party of Solidarity and Action
PP	Public procurement
PPA	Public procurement Agency
PPL	Public procurement law
PPP	Public Private Partnership
RES	Renewable energy sources
RSF	Reporters sans frontiers
SDC	Swiss development agency
SDG	Sustainable Development Goals
SEE	South East(ern) Europe
SIDA	Swedish development agency
SME	Small- and Medium-sized enterprises
SPP	Sustainable public procurement
SWM	Solid waste management
TA	Technical Assistance
UNECE	UN economic commission for Europe
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
VAT	Value Added Tax
WB	World Bank
WFD	Water Framework Directive
WMR	Waste management region
WSS	Water Supply and Sanitation
WTO	World Trade Organization

Executive Summary

P2GreenEST conducted this market screening in the two targeted countries of the projects, which are the **Republic of Moldova** and **Ukraine**, in order to help identify **key sectors of interest**.

The over Eastern Partnership Countries were also slightly analysed.

This document is helpful for clusters, Business Support Organisations and the SMEs they represent to gather information on market opportunities, legal basis and key issues to be tackled linked with P2GreenEST objectives.

The project had identified 3 sectors to concentrate on: **water, waste** and **renewable energies**. These 3 large sectors and the analysis which was undertaken led to the identification of sub-sectors of interest in each targeted country:

The main highlights of this market screening noticed in terms of **water sector** in Moldova and Ukraine a need for **water and sanitation, sustainable management sector** and **improving irrigation services**. The **modernisation of the existing network** of water supply and sewerage as well as **improving the sewerage water services** is one of the main areas in need. In fact, most of the polluted water is poured into the rivers and the surface waters of the country. Additionally in Ukraine, 48% of water is used by the industrial sector, which identifies the need to implement more circular solutions for improving efficiency in this sector. The agriculture sector also represents a significant part of the water consumption with 30%.

As for the **waste sector**, the market screening concluded the necessity of **waste system improvement**, not only from the **legal** perspective but also a need to **raise awareness** and interest in the topic (waste sorting, waste recycling) among the population. Waste may become a source of renewable energy as in Moldova, 78% of the waste comes from the agricultural sector

It is also interesting to note that huge disparities between rural and urban areas exist in terms of waste management. In Ukraine, most of the waste originates from the industrial sector, which requires more innovative and sustainable solutions in the industrial process to tackle this issue.

Regarding the **energy sector**, we can note that Moldova has already went past its original objectives set for 2020 with regards of renewable energy sources, but not all production is consumed since there is a need to reform, modernize and expand the infrastructure of this energy production. By 2030, Moldova has set goals to attain 30% of renewable energies in its energy production. More generally, there is a need to **improve public awareness and identify pathways** to increase the **biomass energy**.

Findings on **public procurement** in the targeted area has helped to identify the main stakeholders in each country and sector. Thanks to the signature of the Deep and Comprehensive Free Trade Agreement (DCFTA) part of the Association Agreement (AA) and its participation to the World Trade Organisation Government Procurement Agreement (WTO GPA), Moldova and Ukraine have made some positive steps towards **transparency, anti-corruption** and **open accessibility** to public procurement (PP) opportunities. This is proved with the set-up of platforms that identify the public tenders open for bidding. They are using intelligent algorithms to source, translate and gather together by key words the most relevant tenders for the targeted sectors and countries. Although, a huge part of them is proposing paid services, which is point to be considered and improved considering its relevance. Nevertheless, in terms of **Sustainable Public Procurement (SPP)**, public authorities have a need to be trained in order to implement successfully SPP bids and align with the national strategies and goals towards sustainability. In Moldova, many contracting authorities exist (around 3000) and

many of them are small, without a centralizing body. Furthermore, no specific authority body on SPP exist.

International markets and the public procurement sector represent huge opportunities for SMEs in the Eastern Partnership region. However, they face high barriers and risks in entering those markets due to **lack of information about export opportunities, internationally incompatible quality standards, and discriminatory rules, as well as complex application procedures for public tenders.**

This report underlined the **key role of international donors in PP** in Eastern Partnership countries, as the majority of SPP opportunities come from projects financed from abroad. That is why it is crucial to **understand the financing mechanism** of these donors that are working in the targeted countries, which are the key partners implementing these big infrastructure projects and may become a huge source of public procurement opportunities for SMEs in the targeted sectors and countries.

Table of Content

1. Introduction to the project.....	11
2. Methodology	13
2.1 Circular economy approach.....	13
2.2 Target sectors	14
3. Eastern Partnership.....	15
3.1 General info, access to the market	15
3.2 Water sector.....	16
3.3 Energy sector	17
3.4 Waste sector	18
4. Republic of Moldova	19
4.1 General info, access to the market	19
A) Facts and figures.....	19
B) Country overview	20
C) Foreign relations.....	22
4.2 Water sector.....	24
A) Overview and priorities the sector.....	24
B) Legal basis.....	24
C) Sector management	25
D) Market opportunities	29
E) Challenges	29
4.3 Energy sector.....	29
A) Overview and priorities the sector.....	29
B) Legal basis.....	31
C) Sector management	31
D) Market opportunities	32
4.4 Waste sector	33
A) Overview and priorities the sector.....	33
B) Legal basis.....	34
C) Sector management	35
D) Market opportunities	35
E) SWOT analysis	36
4.5 Brief conclusions of the fact-finding mission in Moldova.....	36
5. Ukraine.....	38
5.1 General info, access to the market	38

A)	Facts and figures.....	38
B)	Country overview	39
C)	Strengths & Weaknesses	42
D)	Foreign relations.....	42
5.2	Water sector.....	44
A)	Overview and priorities the sector.....	44
B)	Legal basis.....	45
C)	Sector management	46
D)	Market opportunities	47
5.3	Energy sector.....	48
A)	Overview and priorities the sector.....	48
B)	Legal basis.....	52
C)	Sector management	52
D)	Market opportunities	52
E)	Obstacles	53
5.4	Waste sector	54
A)	Overview and priorities the sector.....	54
B)	Legal basis.....	55
C)	Sector management	56
D)	Market opportunities	56
E)	SWOT analysis	57
6.	Practical info on Public Procurement	59
6.1	European and international framework.....	59
A)	WTO Agreement on Government Procurement (GPA).....	59
B)	EU Deep and Comprehensive Free Trade Area (DCFTA).....	59
C)	Green public procurement, sustainability aspects.....	59
6.2	EaP countries and Public Procurement	62
A)	Useful links regarding PP in EaP	63
6.3	Republic of Moldova.....	65
A)	State of the Art	65
B)	General characteristics of the Moldavian legislation on PP.....	66
C)	Public procurement in the targeted sectors	69
D)	Main procurers/buyers	70
E)	Tendering practices / MTender e-platform.....	72
F)	EU and non-EU participation in Moldovan PP.....	72
6.4	Ukraine	74

A)	General characteristics of the Ukrainian Legislation on PP.....	74
B)	Green public procurement, sustainability aspects.....	76
C)	Tenders.....	79
D)	Main buyers and procurers	80
7.	Strategic partners, network development	82
7.1	Definitions.....	82
A)	Clusters and Business Support Organisations	82
7.2	Partners at EaP level	83
A)	Clusters and Business Support Organisations	84
7.3	Partners at EU level	86
A)	Clusters and Business Support Organisations	87
B)	Relevant project consortia	88
7.4	European and International donors.....	90

1. Introduction to the project

The **P2GreenEST** project will work on public procurement in the **circular economy**, and particularly on the three interlinked sectors that are **waste, energy** and **water**, in the two Eastern neighbourhood countries that are the **Republic of Moldova** and **Ukraine**.

Launched in 2009 as a joint policy initiative, the Eastern Partnership (EaP) aims to deepen and strengthen relations between the European Union (EU) Member States and its six Eastern neighbours: Armenia, Azerbaijan, Belarus, Georgia, the **Republic of Moldova** and **Ukraine**.

In spring 2020, new policy objectives have been agreed based on extensive consultations with the EU, partner countries, civil society, academia and businesses. New priorities focus on ecological and digital transformation as well as delivering economies that work for all.

Environmental and climate challenges require urgent action by the EU and the partner countries. The EU will help partner countries to fulfil their nationally determined contributions to the Paris Agreement and modernise their economies, reduce their carbon footprint and move towards climate neutrality, while acknowledging the investment challenges. The EU will also offer support for the energy efficiency of buildings, the development of renewable sources and support the green transition in the region.¹

The EU will support the green transition in the region. It will aim at rules based, undistorted and fair trade and investment in clean technologies, green goods and services and related strategic raw materials. The EU will work with the partner countries to ensure resource security and to deliver simultaneously on the Paris Agreement and on the Sustainable Development Goals.

The same document states that public demands are growing to:

- improve air and water quality;
- manage effectively waste, land, and water resources; and
- respond to extreme weather events and illegal logging and deforestation

Similarly, private sector partners are increasingly considering the opportunities of a greener, circular economy and wish to address the risks caused by climate change.

For environment-related quality of life, increased effort is needed to make urban development more sustainable and further improve the delivery of **environmental services**, such as water supply and sanitation, waste management, green areas and urban mobility.

EU aims to support the:

- prevention and reduction of pollution
- increase the energy efficiency of buildings,
- development of renewable energy sources, notably as a way to accelerate the reduction of
- coal use

The EU will promote the green, circular economy and therefore it stresses the promotion of sustainable product policies, eco-innovation, extended producer responsibility, other ways to prevent and reduce waste, waste management, green public procurement and better consumer information.

¹ Joint Communication: "Eastern Partnership policy beyond 2020: Reinforcing Resilience – an Eastern Partnership that delivers for all": https://ec.europa.eu/info/publications/joint-communication-eastern-partnership-policy-beyond-2020-reinforcing-resilience-eastern-partnership-delivers-all_en

The P2GreenEST partnership will represent a **win-win situation** as the European SMEs will become **more competitive** by getting access to new market segments, while the public authorities from non-EU countries **will gain knowledge and awareness on existing innovative green technologies** for addressing their specific environmental challenges and develop resilient territories.

The project's response to the aims of the Eastern Partnership which are: resilient, sustainable and integrated economies, environmental and climate resilience and digital transformation

2. Methodology

2.1 Circular economy approach

Following the principles of the circular economy approach, P2GreenEST targets the sectors of water, waste and energy in Eastern countries to foster green, innovative and sustainable public procurement.

The circular economy approach is a new model of economy, especially in the Eastern Partnership countries. The model still has to be introduced on the market, because the linear model of economic development, which is currently largely applied and which consists in extracting natural resources, used for production and sales purposes, then consumption and disposal at the landfill, is a destructive one and not at all a sustainable model. The main stakeholders and the population, in general, must be aware that everything around us is produced from natural resources or with the help of natural resources, and the reserves of resources are limited. In the fields of water management and waste management, the circular economy means the reuse of water in production processes, the recovery of waste and the return to the circuit. A green economy results in improved human well-being and social equity, with reduced environmental risks and ecological scarcities.

The six European Union's Eastern Partnership (EaP) countries: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova (hereafter: Moldova) and Ukraine, committed to transition towards a greener economy in the [Joint Declaration of the Eastern Partnership Summit, Warsaw, 29-30 September 2011](#) and in the [Joint Declaration of the Eastern Partnership Summit, Vilnius, 28-29 November 2013 Eastern Partnership: the way ahead](#), as well as the documents of other international fora.

Transposing these commitments into actions requires continued mobilisation across the governments in the region, with joint action from the Ministries of Economy and Environment, as well as across different sectors of the economy and by different stakeholders.

Governments in the Eastern Partnership countries are important consumers, as their expenditure represents around 20% of the GDP, ranging from 11.3% in Azerbaijan to 27.3% in Moldova². Through **sustainable public procurement (SPP)** supported by private, national or international initiatives, governments can deliver greener economies. SPP can successfully harness the power of governments to stimulate a better environmental and social performance of products. Market-driven product information tools such as ecolabelling help define the sustainability of products and communicate this information to guide purchasing choices of individuals, businesses and public authorities towards more sustainable products.

The approach of sustainable public procurement is an important element to create a dynamic framework for improving the performance of products throughout their lifecycle, stimulating demand and supply of better products, and helping consumers to make better choices. In the transition to a green economy, these tools are playing an important enabling role in the overall market transformation that is needed to put in place the circular economic model, which enhances natural capital, saves resources, and lowers environmental as well as social risks.

Due to the support offered through various programmes financed by international donors (development partners), such EaP countries as Belarus, Moldova and Ukraine reviewed national

² <https://www.oecd.org/env/outreach/eapgreen-public-procurement.htm>

legislation, carried out market assessments, while Moldova and Ukraine adopted National Sustainable Public Procurement Policy and Action Plans.

The **P2GreenEST** project aims at strengthening the capacities of the main actors in public procurement, as well as of Small- and medium-sized enterprises (SMEs) in the EU and EaP countries, with a primary focus on the Republic of Moldova and Ukraine, to help economic operators make progress in their activity by adopting innovations and implementing the circular economy model.

2.2 Target sectors

Water, waste and energy infrastructure are arguably the most essential public services. The three interrelated and common challenging sectors that are waste, energy and water have been identified because they:

- are key sectors to address to implement a circular economy approach;
- are totally interconnected in a Reduce/Reuse/Recycle approach, and need thus to be simultaneously addressed;
- correspond to a will from the targeted countries to develop those sectors in a circular and low-carbon approach, in line with the national strategies elaborated over the last years.

By addressing the three sectors of waste, water and energy in a circular economy approach, other major sectors will be impacted, even though not directly targeted by the project, such as: smart cities, ICTs (e.g. smart sensors irrigation, smart systems for waste collection), Industry 4.0 (digital technologies for tracking, tracing and mapping to efficiently manage natural resources), agricultural waste revalorisation (biomass energy production), low-carbon energy, Social and environmental responsibility.

3. Eastern Partnership

3.1 General info, access to the market

The Eastern Partnership was launched in 2009 as a joint initiative and aims to reinforce the political association and economic integration of six Eastern European and South Caucasus partner countries:³

- Armenia
- Azerbaijan
- Belarus (suspended its participation in June 2021)
- Georgia
- the Republic of Moldova
- Ukraine

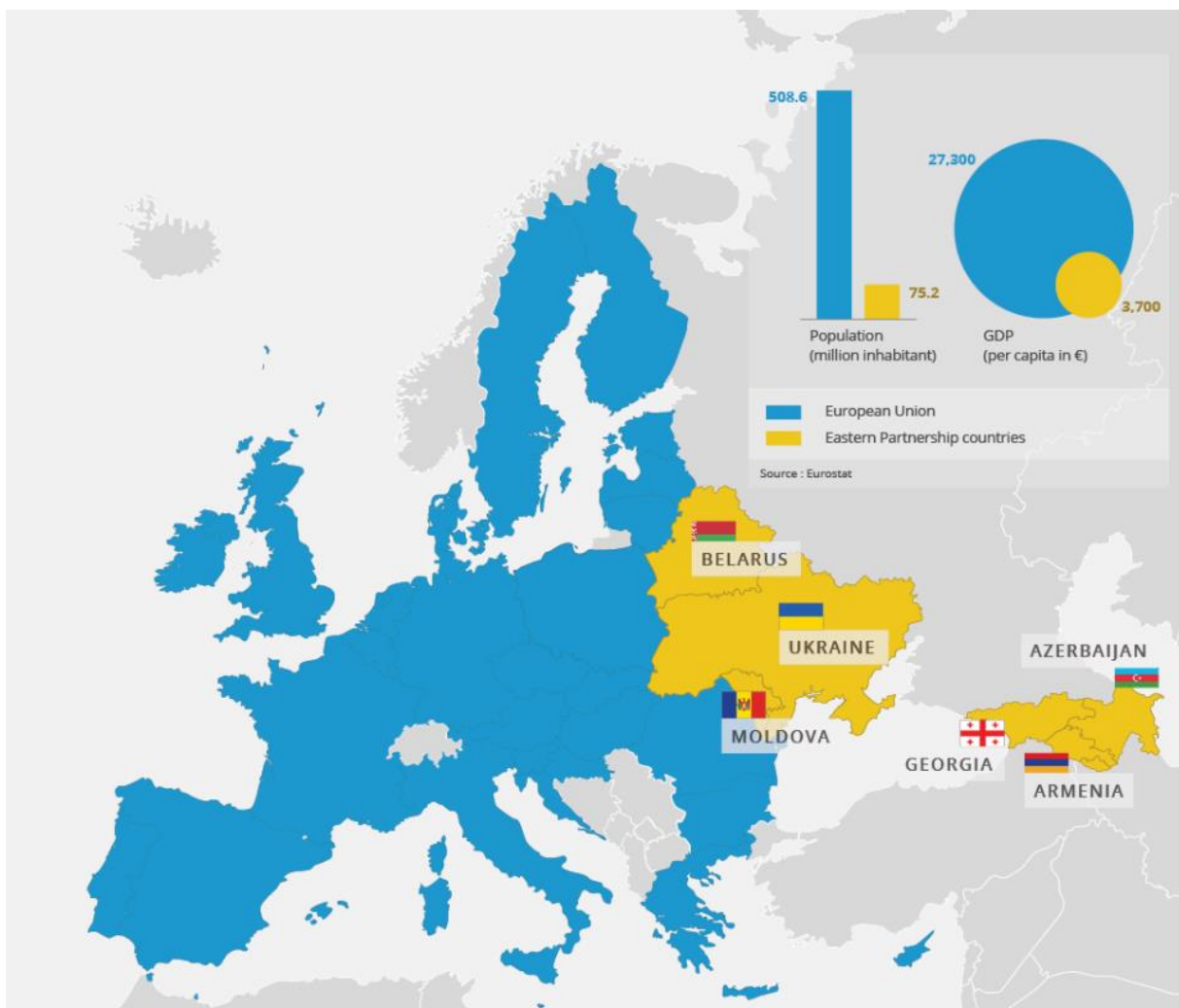


Image 1 - Map of Eastern Partnership countries

³ <https://www.consilium.europa.eu/en/infographics/towards-stronger-eastern-partnership/>

3.2 Water sector

Water is a key resource for the sustainable economic and social development and is becoming a popular topic in EaP countries. Freshwater resources are used by industries, agriculture, households among others. However, growing pressure on water resources in EaP is affecting the availability of water and its quality. The majority of the water resources in the EaP are of the trans-boundary nature i.e., Nistru River shared by Moldova and Ukraine or Dnieper shared by Belarus and Ukraine and often cause tensions between bordering countries. Therefore, an appropriate management of water resources at regional level is strongly needed. Since the past few years, EaP countries have demonstrated their willingness to improve their approaches towards water resource management in line with the EU standards, including, but not limited to:

- Water Framework Directive (WFD) and other relevant water-related directives,
- EU Marine Strategy Framework Directive (MSFD),
- United Nations Economic Commission for Europe (UNECE) Convention on the Protection and Use of Trans-boundary Watercourses and International Lakes (UNECE Water Convention) and the Convention on Environmental Impact Assessment in a Trans-boundary Context (Espoo Convention).

Progress has been made in a number of areas, specifically through dedicated support of EU regional projects, notably: **the Support to the EU Water Initiative in Eastern Europe, the Caucasus and Central Asia** (2012-2016, EUR 3.2 million); the **Environmental Protection of International River Basins** (2012-2016, EUR 7.5 million) and the project **Improving Environmental Monitoring of the Black Sea** (2013-2017, EUR 3.78 million).

Ratification of the Multilateral Environmental Agreements mentioned in the previous paragraph has progressed (and negotiations with countries that have not yet signed the UNECE Water Convention are ongoing. Implementation cooperation on trans-boundary river management is now being established at least at pilot basin level between some of the countries along the lines of the EU WFD. Under the EPIRB project, specific support is provided for the implementation of countries' obligations on the EU WFD and the Danube Convention.

Problems and challenges in water sector in EaP countries

Although there is broad awareness raising and the support of numerous development partners is substantial, the EaP countries still face important challenges on policy and implementation of efficient water resources management.

- **Water quality and quantity problems** exist. **Water quality** is largely affected by direct discharges of untreated municipal and industrial waste waters and other pollutants. Pesticides and fertilisers used in agriculture, mining, oil production, transport and food industry are other key sectors affecting water quality and their negative effects are worsened by emissions from landfills and illegal dumpsites. These results in rapidly deteriorating water resources, with considerable consequences for ecosystems, economic development and human health. Regarding **water quantity**, access rates to water services and sanitation are high throughout the region, especially in urban areas. These factors are supplemented by unregulated water use and increasing water demand for domestic and industrial use, agricultural production and energy generation.
- **Existing infrastructure for waste and water collection and treatment in the region need to be upgraded** and their capacity expanded. Allocation principles should be further developed and incentives for water use efficiency identified and implemented, using a mix of policy instruments. Distribution networks are generally deteriorating with declining water quality and significant grid leakages as a result.

- **Natural and man-made disasters** (floods, heat and cold waves, earthquakes, forest fires, industrial catastrophes...) which may lead to loss of lives, displacement of population, destruction of costly infrastructures and negative impact on the economic growth and potential for sustainable development of the countries affected. Climatic variability and change further enhances the water stress. When trans-boundary river basins or lakes are concerned, activities in the upstream countries affect both quantity and quality of the water available for the downstream ones.

In the EaP region the only international convention for the management of specific trans-boundary river basins is the [Danube River Protection Convention](#). As a consequence, the International Commission for the Protection of the Danube River (ICPDR) is the only international river basin authority in the East.

3.3 Energy sector

For most of the EaP countries, energy reduction is high on the political agenda as they are often highly dependent on expensive imported gas, which places a heavy burden on their economies. At the same time, decentralisation efforts in recent years have led to increased responsibilities at local level, though not always accompanied by the necessary financial support. Investing in local authorities will make economies more competitive, leading to local job creation and economic growth.

The Eastern Partnership includes interconnectivity in energy and transport, energy efficiency, environment and climate change as one of its four thematic cluster priorities.

The objective is to support partner countries on their way towards a low-carbon economy. The work is guided by the 2020 deliverables and is carried out in the multi-sectoral Platform 3 and in the Eastern Partnership energy panel as regards cooperation in this specific area.

The energy work programme for 2018-2019 involves finding ways to stimulate the construction of missing infrastructure links, bring partner countries' energy-related rules more in line with EU rules, promote energy efficiency and renewable energy as well as nuclear safety and work on conventional and unconventional oil and gas resources in the safest and most efficient way.

The regional [EU4Energy programme](#) aims to improve the quality of energy data and statistics, shape regional policy-making discussions, strengthen legislative and regulatory frameworks and improve access to information in the partner countries. The implementing partners are:

- the [International Energy Agency](#)
- the [Energy Charter Secretariat](#)
- the [Energy Community Secretariat](#)

One of the more promising strategies for EaP countries rests with a reliance on the energy sector. And although the six Eastern Partnership countries are characterised by a wide variance in energy profiles, Georgia, Moldova, Ukraine and Belarus stand out as strategic energy transit states. While Azerbaijan is the leading energy producer among the group, Armenia has an operational nuclear power plant, allowing it to export electricity.

3.4 Waste sector⁴

With the “take-make-use-dispose-pollute” approach currently dominating businesses strategies around the globe, excessive amounts of generated waste have posed a great challenge to most of the world’s economies. At the same time, with many nations’ commitment towards greater sustainability, this linear model is supposed to be replaced by the circular one with the “make-use-reuse-remake-recycle” paradigm.

Although in the EU, significant progress has been achieved with respect to minimizing the volumes of the disposed waste, this advancement has not been of similar magnitude in the Eastern Partnership countries. Prior to the COVID-19 crisis, all the EaP nations were identified to have similar challenges in the waste and water sectors. In particular, all the countries experienced low integration of the separate waste collection, sorting and recycling practices into the general waste treatment system.

Though the EaP countries share similarities pertaining to the joint Soviet legacy, their current waste management systems happen to be at different sustainability and efficiency levels. For instance, while such countries as Belarus achieved significant practical progress in the field of separate waste collection, Georgia, Moldova, and Ukraine are more progressive in terms of synchronizing national waste management legislation with the European one. At the same time, such issues as illegal waste dumping still appear to be present in all EaP nations despite the general attempts to eliminate it.

⁴ Waste and Water Management in the Time of COVID-19: A Tale of Six Countries (EaP CSF COVID-19 POLICY PAPER)-
<https://eap-csf.eu/wp-content/uploads/Waste-and-Water-Management-in-the-Time-of-the-COVID-19.pdf>

4. Republic of Moldova

4.1 General info, access to the market

The Republic of Moldova is a country lying in the north-eastern corner of the Balkan region of Europe. Its capital city is Chişinău, located in the south-central part of the country. Moldova is bounded by Ukraine to the North, East, and South and by Romania to the West. The bulk of the Republic lies between the great meandering Prut and Dniester rivers.

A) Facts and figures⁵

Capital	Chişinău (ca. 814,000 inhabitants)
Population, 2019	3.55 million
Area	33,847 km ²
Major languages	Romanian, Russian, Ukrainian
Currency	Lei, 1 EUR = 19.5 MDL
GDP, 2019	\$10,262 billion
GDP per capita at PPP, 2019	\$13,574
Life expectancy ⁶	72

a) Geography⁷



Image 2 - Republic of Moldova, Encyclopædia Britannica, Inc

The country has an average elevation of 147 meters, alternating between hills, valleys and plateaus.

⁵ <https://invest.gov.md/en/moldova-at-a-glance/>

⁶ <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=MD>

⁷ <https://www.britannica.com/place/Moldova#ref42805>

The Dniester River and the Prut are the two main waterway of the country, making for the most part of the north of the country a very highly fertile soil to grow grain, tobacco and sugar beets. The southern part of the country, although less fertile, still grows grapes and sunflowers.

The historical past of the territory has affected the quality of the water, when, during the Soviet period, the excessive use of fertilizers, pesticides and herbicides, contaminated the soil and the groundwater.

b) Regional structure⁸

The Republic of Moldova is organized into 32 districts, 5 municipalities (Chisinau, Balti, Tighina, Tiraspol, Comrat) and 2 Autonomous Territorial Units (Gagauzia and Transnistria).

Transnistria, officially “Administrative Territorial Units of the Left Bank of the River Dniester”, is disputed regarding its status: the local government considers that is it an independent republic named “Transnistrian Moldovan Republic”, while the national government and the international community considers the territory an Autonomous Territorial Unit.

B) Country overview

a) Political situation

Since its independence from the Soviet Union in 1991, pro-Russian and pro-European parties have disputed and separated the country into two camps. The current president, Mrs Maria Sandu, is pro-European and has conducted a political strategy to bring closer together the EU with the Republic of Moldova. Her victory in 2020 of the presidential election added with the 2021 parliamentary win of her pro-European Party of Action and Solidarity (PAS) express once more Moldova’s European vision.

Timeline⁹

1918 - Following the Bolshevik revolution in Russia, Bessarabia declares independence. Its parliament calls for union with Romania.

1920 - Treaty of Paris recognises union of Bessarabia with Romania. The Bolsheviks do not.

1924 - Moldovan Autonomous Soviet Socialist Republic established east of the Dniester river within Ukraine.

1940 - The Soviet Union annexes Bessarabia and combines it with most of the Moldovan Autonomous Soviet Socialist Republic to form the Moldavian Soviet Socialist Republic.

1941-1945 - Romania re-establishes control after its ally Nazi Germany invades the Soviet Union until the end of the war, when the Soviet Union regains control.

Late 1980s - Resurgence of Moldovan nationalism in the wake of the Gorbachev reforms in the Soviet Union.

1990 - Moldova declares sovereignty. The Trans-Dniester region declares independence, which the Moldovan government refuses to recognise.

1991 - Moldova declares independence. It joins the Commonwealth of Independent States, the successor to the Soviet Union.

1992 - Russian-speaking nationalist fighters patrol streets of the self-proclaimed Trans-Dniester region

1997 - Negotiations resumed with Trans-Dniester. Agreement is signed granting further autonomy and calling for more talks.

⁸ <https://moldova.md/en/content/administrative-territorial-organization-moldova>

⁹ <https://www.bbc.com/news/world-europe-17601579>

1998 - Elections see communists emerging as the biggest party, but a centrist, reform-minded coalition forms the government.

2001 February - Elections see the communists under Vladimir Voronin win just over 50% of the vote.

2009 September - Four pro-western parties form coalition government. Liberal Democratic Party leader Vlad Filat becomes prime minister.

2014 June - Moldova signs association agreement with the European Union, prompting Russia to impose import restrictions on the country's agricultural produce.

2014 November - National Bank uncovers official inaction over embezzlement of \$1bn - about 12.5% of annual GDP - from the banking system, prompting a major political crisis and credit crunch.

2016 November - Pro-Russian candidate Igor Dodon beats pro-European candidate Maia Sandu to win the first direct presidential election in 16 years.

2020 November - President Dodon loses his re-election bid to his former opponent Maia Sandu.

b) Economic overview¹⁰

According to the World Bank, Moldova's annual GDP (gross domestic product) growth averaged about 4.2% from 2016 to 2019. Due to the impact of the COVID-19 pandemic, GDP growth declined by 7% in 2020.¹¹

Moldova's economy is supported by 43 Free Trade Agreements, ensuring access to a market of almost 1 billion consumers. Among others, the Agreement with the EU, the Commonwealth of Independent States, Central European Free Trade Agreement, Turkey and member states of the Organization for Democracy and Economic Development (GUAM). The geostrategic positioning of the country puts Moldova at the gateway between East and West.

The EU stands as the highest part of Moldova's exports and biggest trading partner: in 2020, the EU accounted for 67% of Moldova's exports and 52% of its total trade.

Chisinau, the capital, won the "Emerging city of the year in SEE" award in one of the most important conferences in the field of Business Process Outsourcing & Shared Service Centre – "CEE Business Services Summit and Awards 2020". Moldova ranks 48 out of 190 analysed economies in the World Bank report "Ease of doing business 2020".

c) Macroeconomic overview

The communist era saw Moldova's industrial pattern diversified, agriculture was modernized, transport and building were rebuilt. After the independence of the country, the government began a gradual transformation of the country to shift from a centrally planned economy towards a market economy. A vast programme of privatizations began with distribution of ownership vouchers of former state enterprises to the public. Although the programme was ambitious, the reality was slow to put into practice due to the lack of foreign investment, corruption matters and economic pressures.¹²

Fast forward to today, despite having solid economic performance measured over the last two decades, the country remains as one of the poorest countries in Europe.

¹⁰ <https://www.worldbank.org/en/country/moldova/overview#3>

¹¹ <https://www.worldbank.org/en/country/moldova/overview#1>

¹² <https://www.britannica.com/place/Moldova/Economy>

The population and settlement patterns have changed in the last years and has affected the economy: while the young generation (young-workers and students mostly) have left the country towards western neighbouring countries, the rest of the generation is aging, resulting in a low productivity growth and dependency to pensions and social assistance for the lower-income of the population. It is estimated that at least one million Moldovan citizens live abroad.

d) Foreign direct investment ¹³

Despite the instability of the political climate prior to the 2020 Presidential election, the economic performance of the country is improving and makes it attractive for Foreign Direct Investment (FDI). The rate of inflows increased from 2.7% of GDP in 2018 to almost 5% in 2019, making it the second highest in Eastern Europe and South Caucasus region (EESC). In 2009–2013, the majority of FDI inflows was market-seeking investment in non-tradable sectors, such as banking and transportation. The [National Strategy for Investment Attraction and Export Promotion 2016 - 2020](#) identified a need for increased efficiency-seeking FDI, and the low investment taxes and cheap labour costs are increasingly attracting such investment. The main targets are services, such as business process outsourcing and tourism, and manufacturing, which is underpinned by the country’s Soviet-era industrial heritage. Employment in the automotive industry is growing; the country is a strong second- and third-tier supplier of car parts, concentrated in the free economic zones and attracting mainly Japanese and German investment.

C) Foreign relations

a) Relations with the EU

Sustaining the economy’s robust GDP growth will increasingly depend on accelerating and solidifying economic integration. The EU Association Agreement and the Deep and Comprehensive Free Trade Area (DCFTA) have opened a range of opportunities. The EU accounts for 54% of the country’s total trade, making the EU Moldova’s biggest trade partner. Vice-versa, 64% of Moldovan exports are destined to the European market. Moldova is the 59th EU trade partner and cumulated €4.7 billion in 2019, which showed an increase of 40% since 2015¹⁴. The main EU imports from Moldova are electrical machinery and equipment, clothing and oil seeds.

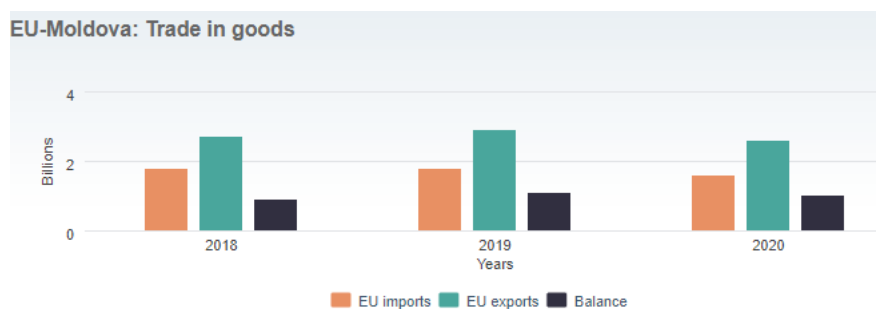


Image 3 - EU-Moldova: trade in goods

The Republic of Moldova is ranked the most diversified in the EESC sub-region according to the merchandise concentration index for exports.¹⁵

¹³ https://unece.org/fileadmin/DAM/ceci/icp/Capacity_building/IPO_launch/IPO_2020_7_MOLDOVA.pdf

¹⁴ <https://ec.europa.eu/trade/policy/countries-and-regions/countries/moldova/>

¹⁵ https://tcdata360.worldbank.org/indicators/conc.dvscst.idx.ex?country=MDA&indicator=3000&viz=line_chart&years=1995,2017

b) Selected country profiles of the Republic of Moldova published by international organizations

- [Amnesty International: Moldova](#)
Amnesty International is a non-governmental organization focused on human rights.
- [BBC Country Profile: Moldova](#)
Country profiles by the British public service broadcaster.
- [Background Notes: Moldova](#)
- [GlobalEDGE: Moldova](#)
- Moldova ranking by the Global business knowledge portal.
- [OEC: Moldova](#)
The Observatory of Economic Complexity provides the latest international trade data.
- [The World Factbook -- Moldova](#)
The CIA World Factbook Moldova Page.
- [Reporters Without Borders: Moldova](#)
RSF (Reporters sans frontières) is an international NGO that defends and promotes media freedom.
- [The World Bank – Moldova](#)

4.2 Water sector

A) Overview and priorities the sector¹⁶

Although access to clean water and hygiene is a precondition for a healthy life, it is estimated that around 25% of the incidence of gastrointestinal diseases are caused by water in Moldova. Due to the lack of investment and poor maintenance in the past 20 years, at least half of the existing water and sewerage infrastructure is in significant need of repairs and/or rehabilitation. Issues with access to infrastructure and the quality and safety of services provided occur, especially in rural areas.

In urban areas, only 71,6% of residents have access to centralized water and only 63% to sewerage services. This rate is even lower in villages: 27,9% and 0,3 % respectively. Generally, almost 44% of the population does not have access to clean drinking water. It is estimated that almost 80% of wells, which most of the time are the main source of water in villages, do not meet safety standards. Samples of water supplied in school measured that it exceeds the maximum permitted concentration of chemicals in 54% of cases.

Data from 2019 shows that in Moldova in average, 17,7% of the population has access to sewerage network: 47% in urban areas and only 0,3% in rural areas.¹⁷

B) Legal basis

In order to restore and develop water supply and sewerage systems to provide good quality services to consumers, solving problems related to the rational use and preservation of water resources, environmental protection, the Government of the Republic of Moldova by Decision no. 1406 of 30.12.2005 approved the [Water Supply and Sewerage Program of the localities of the Republic of Moldova until 2015](#).

In order to establish the priorities for the implementation of the respective Program, the Government of the Republic of Moldova by the Decision no. 662 of 13.06.2007 approved the [Strategy on water supply and sewerage of localities in the Republic of Moldova](#). According to the provisions of this Program, the problems related to the water supply of 43 urban localities (municipalities and cities) with a total population of about 1.5 million inhabitants were to be solved, and 556 rural localities (villages and communes) with a population total of about 2.1 million inhabitants. In order to carry out the Programme according to the calculations, financial means in the amount of 5.165 billion lei (€258.5 million) are required, including:

- for urban localities – 4.097 billion lei (€204.85 million), of which 2.517 billion lei (€125.85 million) for the rehabilitation of water supply systems, 1.58 billion lei (€79 million) for sewerage systems;
- for rural localities 1.067 billion lei, of which 713.5 million lei (€33.35 million) for water supply systems and 353.5 million lei (€17.675 million) for sewerage systems.

Funding sources are divided as follows:

- for urban localities - 31% of the account of budgets of all levels and 69% of the account of credits and grants offered by international financial organizations;

¹⁶ <https://www.md.undp.org/content/moldova/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation.html>

¹⁷ Presentation done during the discovery visit done in Moldova on the 25th of October during the event organised by the French Embassy in Moldova on Waste Water and Intercommunality.

- for rural localities – 28.3% of the account of budgets of all levels, 61.7% of the account of credits and grants offered by international financial organizations and 10% of the population contribution. All these actions will contribute to the considerable increase of the quality of life, to the development of the economy and to the increase of the welfare of the population.

Out of the total number of 1632 localities in the Republic of Moldova, 1055 localities currently have drinking water supply systems, including 3 municipalities, 52 cities (100%) and 1000 rural localities, representing 61.3% of their total number. Out of the total population of 3560.4 thousand in the republic, 1.562.314 inhabitants have access to public water supply systems. The number of the population that will benefit, annually, from the access to the water supply and sewerage systems, are respectively 45-50 thousand and 35-40 thousand people. These figures have been calculated based on the provisions of the Millennium Development Goals, promoted by the United Nations (UN), by which by 2015 the number of people without sustainable access to drinking water supply and sewerage systems will be reduced by 50 %.

Currently, 623 localities have public sewerage networks, including: 3 municipalities, 52 cities, 565 rural localities. The communal sewage system of the localities of the Republic of Moldova consists of 464 treatment plants, 557 pumping stations and sewerage networks with a total length of 2966 km. Of the total volume of wastewater discharged in 2010, 585 million m³ were conventionally pure (without treatment) - 552 million m³, and 116 million m³ were normatively treated. **As a result of the allocation of insufficient financial resources from the national budget, the development of water supply and sewerage infrastructure in the country takes place mainly with the support of Development Partners.** A number of water supply and sewerage projects financed by foreign investors are currently being implemented. Thus, Moldova benefits from financial assistance in the field, from development partners and financial organizations operating in the country.¹⁸

C) Sector management

In Moldova, the main procurers are represented by state authorities (local and central public authorities), which often are supported by international donors like the EU, GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), World Bank, EBRD (European Bank for Reconstruction and Development) to implement projects related to water management.

In 2000, was founded the Association “[Moldova Apa-Canal](#)” which is a voluntary non-commercial organization uniting enterprises providing services of water supply and sanitation in Moldova. The main objective of the association is to provide assistance to the companies active in water management during the production process, the technical and commercial activity, as well as lobbying their interests with the central and local public authorities.

The basic objectives of the Agency “[Apele Moldovei](#)”:

- Implements the state policy in the field of water management and water improvement, water supply and sewerage, participates in the elaboration of legislative and normative acts and policy documents in the field of protection of localities and agricultural lands against floods and sub-floods, as well as water supply systems and sewerage;
- elaborates and plans the measures for the protection of aquatic resources, simultaneously with their management, including the management of the water supply and sewerage systems of the localities from Moldova;

¹⁸ <http://www.apelemoldovei.gov.md/libview.php?l=en&id=257&idc=124>

- elaborates the management plans according to the hydrographic basin principle;
- ensures the implementation of the basin principle of water management, satisfying the needs of the population and economic agents in water supply and sewerage services, by coordinating the activity of enterprises and organizations in the field;
- ensures the realization of the measures deriving from the interstate collaboration in the field of water resources and the attraction of investments in the construction of water supply and sewerage objects, water management and hydro-improvement;
- undertakes the necessary measures related to the implementation of the provisions of the Concept of the national policy in the field of water resources, the Concept of the National Geographic System, the Framework Directive and other acts of the EU in the field of water; National strategy in the field of drinking water supply and sewerage.

The following scheme summarizes the organisational structure of water management in Moldova¹⁹:

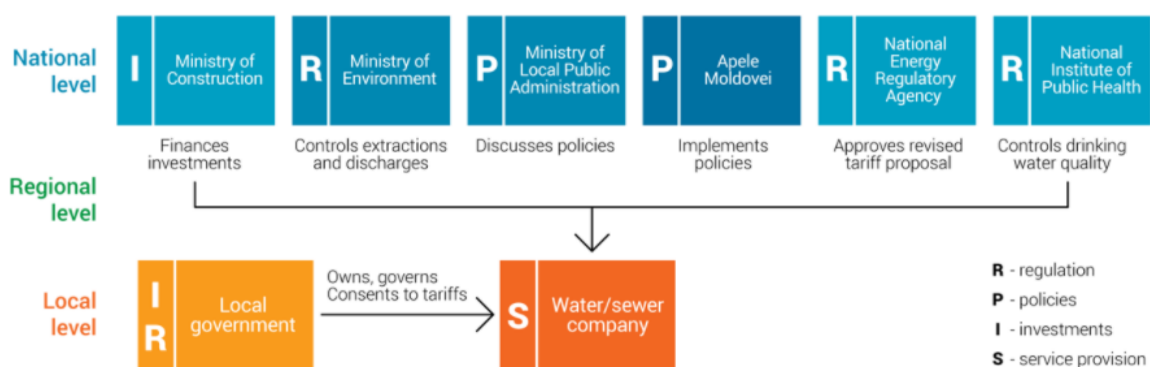


Image 4 - water services sector organisation

Below are described a few relevant water and sanitation projects implemented in Moldova with external assistance from international organizations:

Project 1 Inter-municipal water management along the Dniester River

Commissioned by: German Federal Ministry for Economic Cooperation and Development (BMZ)

Country: Republic of Moldova

Lead executing agency: Bureau of Reintegration at the State Chancellery of Moldova

Overall term: 2016 to 2021

Context

The Dniester River and its tributaries constitute the major drinking water reservoir of the Republic of Moldova and Transnistria, the region that broke away from the rest of the country in the early 1990s. They are the main source of water supply for agriculture, industry and the two million inhabitants of the eastern part of Moldova, including Transnistria. The wastewater discharged from the dilapidated and inefficient infrastructure on both banks contaminates the river, the self-cleaning capacity of which is weakening due to the structure of the riverbed and the poor oxygen balance.

Improving the water supply and sanitation (WSS) infrastructure would serve to protect water resources and soils along the Dniester in the long term. However, it requires not only enormous investments but also cooperation between the communities, towns and cities under Moldovan and Transnistrian

¹⁹ <https://sos.danubis.org/eng/country-notes/moldova/>

administration. In particular, the Organization for Security and Co-operation in Europe (OSCE), the Meseberg initiative of the German Government and diverse EU activities have sought for many years to mediate and develop confidence-building measures with a view to resolving this conflict.

The lack of financial resources and constructive inter-municipal cooperation coupled with the inadequate capacity of the WSS operators to deliver efficient, citizen-oriented services are obstacles to improving the relevant infrastructure. The Moldovan Government considers the political, social and health impacts of the poor water supply and sanitation services in the region as a priority development challenge. This view is shared by the development partners in the country and is reflected in the substantial assistance accorded by the donors in the WSS sector.

Objective

The institutional framework for inter-municipal management of water resources has improved.

Approach

The project was developed on the basis of a feasibility study conducted by GIZ covering 24 urban and rural settlements with some 76,000 inhabitants on both banks of the central Dniester basin in Moldova.

Synergy is created through the project activities and the confidence-building process between the Government of Moldova and Transnistria authorities, facilitated by the OSCE. The project also supports Moldovan institutions in meeting their commitments to improve the protection of biodiversity in the Dniester and Black Sea areas, and in tackling the relevant environmental measures at regional and local level.

The project assists with the long-term realisation of a change process in the WSS system in the region, by means of participatory development, good governance and dialogue-promoting measures, on the basis of enhanced inter-municipal institutional frameworks, it is aligned to the requirements of the National Strategy for Water Supply and Sanitation (2014-2028), which is the fundamental policy document for the sector.

The project operates in three areas:

1. Confidence-building through inter-municipal cooperation in water resource management. This is to be achieved by means of a better understanding of potentials and expectations of all stakeholders, as well as of the current obstacles and challenges facing cooperation. To this end, the project uses methodological tools, consultations and dialogues designed to identify strengths and potentials for building trust. It also helps to establish joint monitoring systems for the implementation of inter-municipal action plans and environmental protection activities.

2. Strengthening the capacities of public utilities for improved water supply and sanitation services. This is to be achieved through a capacity development programme for the Local Public Administrations (LPAs). The WSS operators need to upgrade their skills in order to perform proper management, operation and maintenance, especially when new technologies for wastewater treatment are introduced. The balanced participation of the two sides and the various ethnic groups in the capacity development process will ensure the transparency of decisions taken and joint ownership of the development process.

3. Developing investment packages for improved water supply and sanitation services. The project is helping to devise a system to prioritise in a binding manner investments and other measures geared to the technical and institutional development of financially sustainable water supply services and

adequate wastewater management in the project area. By presenting investment needs and development prospects clearly, the project also aims to contribute to the dialogue with potential development partners in the WSS sector.

Results

Environment and trust-building. An action plan has been developed for the joint environmental working group. For the first time since 1992, Transnistria also took part in training for staff from local water companies.

Joint planning. In six workshops with 72 participants, 16 strategies for developing the local water sector were developed and adopted by the municipalities.

Developing the skills and capacity of the WSS operators. Business inventories were carried out at three of the operators. Five three-day training courses were held for operating staff.

Investment planning. The joint steering committee has prioritised 18 investment packages; 12 have been prepared. Implementation for an EU-funded project in Ustia has been planned. Three direct measures for infrastructure (including pumps) were agreed on together.

Project 2 Modernization of local public services

Since 2010, GIZ has been implementing the project “Modernisation of Local Public Services in the Republic of Moldova” (MLPS) under the commission of the German Ministry for Economic Cooperation and Development (BMZ). At the beginning of 2016, the implementation of the 2nd phase of the MLPS project commenced. The project builds on the results of the first phase and has a deadline for project implementation 12/2021. For the activities to the EU Action for Construction of WSS and energy efficiency (EE) infrastructure, the project was extended until September 2022. The project’s objective is the improvement of the framework conditions for a citizen-oriented implementation of regional development policy in priority sectors of local public service provision.

The project works in three priority sectors:

1. water supply and sanitation (WSS),
2. energy efficiency in public buildings (EE), and
3. solid waste management (SWM).

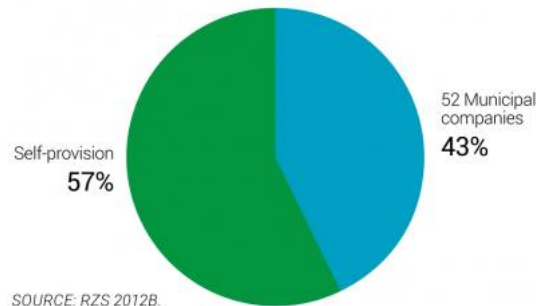
The MLPS project is implemented in synergy with two EU-funded Actions: Construction of WSS and EE infrastructure and Citizen’s Empowerment. The project consistently applies a multi-level and multi-stakeholder approach to improve the framework conditions for the modernisation of local public services in the priority sectors. Measures to improve local service delivery are part of a comprehensive 5-pillar approach for capacity development in (i) establishing integrated local planning procedures, (ii) establishing inter-municipal cooperation structures, (iii) assisting in the institutionalisation of adapted trainings and education for service operators and local authorities, and (iv) implementation of awareness raising and mobilisation policies for citizens. The complementary funding of infrastructure projects via funds from the EU, Switzerland, Romania and the German Regional Development Fund represent the fifth element (v) of the approach. To implement the investment measures, partner systems are used as far as possible, thus avoiding the creation of parallel implementation structures.

The tenders published within the project are published on the web-page:

<https://www.serviciilocale.md/en/categorie/tendere/>

D) Market opportunities

The following graphic gives an overview of the market shares of water management in Moldova:²⁰



SOURCE: RZS 2012B.

Image 5 - water services provider types and market shares

E) Challenges

The water sector in Moldova encounters many challenges, such as:

- Access to safe drinking water and proper sanitation
 - In rural areas: 1.5 million inhabitants do not have access to piped water, 1.8 million to flush toilets.
 - In urban areas: extensions to existing systems to improve their reliability and efficiency are needs to provide health benefits to the population
- Financing upgrades of the sector infrastructure
 - It is estimated that €705 million will be needed to accomplish the goals set in the government's strategy on the water sector.
- Addressing affordability issues

4.3 Energy sector

A) Overview and priorities the sector

a) Traditional energy²¹

The Republic of Moldova is highly dependent on imports of electricity and gas; the country is in fact producing only about 20% of its annual electricity consumption. The country has one hydropower plant, the Costesti Hydropower plant. Imports from Ukraine of electricity represent the majority of its supply.

Regarding gas, Moldova's gas consumption relies almost exclusively to Russian gas imports. The company Moldavskaya GRES (MGRES) is active in both energy sources and accounts for most of the country's energy.

Gas supply shock risks in the country are high and previous experiences have shown failures to the current system. For instance, since most of gas is supplied from Russia, through Ukraine, in 2006 and 2009 when the two countries experienced political disputes, Moldova was left without gas supplies for

²⁰ <https://sos.danubis.org/eng/country-notes/moldova/>

²¹ IEA (2020), Moldova energy profile, IEA, Paris <https://www.iea.org/reports/moldova-energy-profile>

several weeks²². In order to prevent such events, the country has decided to diversify its gas import sources, building the new Iasi-Ungheni pipeline with Romania which is expected to supply all of the country's gas demand (except for the Transnistrian region). Russian gas imports will continue, but at smaller volumes.

Rehabilitation of the current network of energy infrastructure is ongoing and funded by international donors such as the EBRD, the European Investment Bank (EIB) and the EC Neighbourhood Investment Facility (NIF).

*b) Renewable energy*²³

The potential of renewable energy sources (RES) of the country is not fully exploited, specifically regarding wind and solar sources. Renewables represent 20% of Moldova's energy mix, consisting almost fully of solid biofuels (19% in 2018).

With the country's intensive agricultural activity, biomass is regarded as one of the most important RES, with a potential to extend it for energy production.

Taking into consideration the Survey on energy Consumption in Households conducted in 2016, more than ¼ of the energy consumed in Moldova is "green", this being mostly oriented towards heating (biomass).

Moldova's renewable energy share in 2018 vs renewable energy target

Renewable energy sources (RES) sectoral contribution	2018 (%)	Target (%)
RES in heating and cooling	44.96	27
RES in electricity	2.59	10
RES in transport	0.27	10
Overall RES share (%)	27.46	17

Image 6 - Moldova's renewable energy share in 2018 vs. renewable energy target

According to the latest statistical data available at the moment (2019), the Republic of Moldova has already surpassed the global target set for 2020 in the field of renewable energy, with a share of renewable energy in gross final energy consumption of over 23.8%, compared to the global target of 17%. However, the share of final consumption of electricity from renewable energy sources in gross final consumption of electricity (GFC-EE) is more modest, with only 3.0% of the minimum 10% non-binding 2020 target being achieved.²⁴

²² https://ec.europa.eu/commission/presscorner/detail/en/IP_09_38

²³ Idem, <https://www.iea.org/reports/moldova-energy-profile/sustainable-development>

²⁴ <https://particip.gov.md/ro/document/stages/proiectul-definitivat-al-hotararii-guvernului-cu-privire-la-aprobarea-limitelor-de-capacitate-cotelor-maxime-si-categoriilor-de-capacitate-in-domeniul-energiei-electrice-din-surse-regenerabile-pina-in-anul-2025/8526?fbclid=IwAR2eh8WJfXZBTC9wXZ4bAhz4dDymNeTMF2aSXL5apWlenH7CKhiENsS1XYM>

B) Legal basis

- The Law on Electricity ([Law No. 107 of 27.05.2016](#)) ensures liberalisation of the electricity market and transposes all principles and rules of the EU's Third Energy Package. In particular, the law clearly sets the rules for businesses in the power field, especially regarding mandatory requirements in unbundling. In addition, this law ensures that all final customers are eligible to buy electricity from any generator or supplier – although as yet no one has exercised the right to switch providers.
- The Law on Natural Gas ([Law No. 108 of 27.05.2016](#)) introduces similar rules for liberalisation of the natural gas market. In particular, it sets out the unbundling requirements and envisaged derogation for the Moldovagaz JSC and its subsidiary companies, owned by Gazprom.
- The Law on Energy ([Law No. 174 of 21.09.2017](#)) provides a set of rules for all operators in the energy field, as well as for end-users of energy resources. It also consolidates the independence, authority and transparency of the National Energy Regulatory Agency (ANRE). The law establishes all the mechanisms and principles regarding the functioning of the ANRE, including: appointment and mandate of a director; budget formation and related financial management principles; and other provisions aimed at creating a healthy and favourable environment within the energy sector, focused both on attracting investment and on the supply of reliable, qualitative and affordable services to end-users.
- The Law on Energy Efficiency³ ([Law No. 139 of 19.07.2018](#)) consolidates the national institutional framework capacities for implementing energy efficiency policies and developing relevant financing mechanisms. The law also enables active participation by third parties, as it provides a necessary framework for energy performance contracts (via energy services companies, or ESCOs) and allows private investment in the public sector. The law contains the following pillars: implementation of the concept of energy efficiency obligation schemes; strengthening the exemplary role of public buildings; introduction of the obligation for large companies to perform obligatory energy audits; popularisation of sustainable public procurement; and promotion of energy performance contracts as market-driven funding instruments for energy efficiency measures.
- The Law on the Promotion of the Use of Energy from Renewable Sources ([Law No. 10 of 26.02.2016](#)), in force since March 2018, comes with new support mechanisms for renewable energy investments. These include: feed-in tariffs; net metering; and tenders. At the same time, to ensure local energy autonomy and achieve the goal of distributed energy generation, the law supports the development of small-scale, community promoted renewable energy projects. Moreover, it provides: an obligation by the central electricity supplier to purchase renewable electricity; guaranteed and non-discriminatory access to the grid; and priority dispatch. While the government's efforts have focused mostly on the use of renewables in the power sector, the law also introduces the possibility of importing mixed petroleum products. This would be as a first step in enabling the use of liquid biofuels, while working towards achieving the target of 10% renewable energy use in transport by 2020. In 2018, the government launched a comprehensive exercise to assess the costs and efforts related to reaching the target, in parallel with developing the required legislation on sustainability criteria for biofuels.

C) Sector management

The Ministry of Economy and Infrastructure is in charge of developing and implementing strategies and policies related to energy, such as Moldova's Energy Strategy 2030²⁵

²⁵ <http://www.mei.gov.md>

The Ministry of infrastructure and regional development is responsible for developing energy policies and strategies, as well as for implementing international environment treaties.

The Energy Efficiency Agency (EEA) is the implementing agency under the national energy efficiency and renewable energy programmes. It promotes investment in energy saving and renewable energy projects, in accordance with existing government programmes.²⁶ The central buyer for electricity from renewable sources is the state-owned company Energoacom, which is also the supplier of electricity for all the regulated electricity companies in Moldova. Moldova still has to implement the Energy Efficiency in Buildings Directive. Climate legislation is in the process of being prepared by the Moldovan authorities. Work on the National Energy and Climate Plan is still at a relatively early stage.

The following companies ensure most of the distribution/management of energy to the country:

- [Moldavskaya GRES](#) (MGRES) in the Transnistrian region supplies 80% of the electricity.
- [MoldovaGaz](#) is in charge of managing pipelines of natural gas on the West of the Dniester River, and owns parts of it. The company is owned at 50% by Gazprom, 36.6% by the Moldovan government and the remaining by the Transnistrian administration²⁷.

D) Market opportunities²⁸

The following sub-sectors have been identified as being of high opportunity for future project development in renewable energies:

- Small hydro
 - Only one hydro installation is currently operational: the Stinca-Costesti hydropower plant (HPP) based on the Prut River
 - We can note one other HPP on the Dniester River, but its production is not feed into the local market
- Solar
 - The current cumulative capacity of implemented solar projects is of 4.0 MW and sourcing from roofs of industrial, private or public buildings.
 - An interactive [Solar Map](#) is available (Global Solar Atlas, World Bank Group) showcasing solar opportunities to the investors.
- Wind
 - Measured end of 2019, up to 35.6 MW originated from wind installation source Moldova. Nevertheless, due to technical and balancing constraints, the wind installation currently in place can only account only 100 MW, when the technical conditions for intermittent technologies allow 1GW.
- Geothermal
 - Due to its high price, geothermal technologies (heat pumps) only represent a small number of projects throughout the country. Nevertheless, businesses and individuals can switch from fossil fuels to ground heating though the financial help of international financial institutions (IFIs).
 - The rise of tariffs of natural gas and electricity is rising the feasibility of geothermal options.
- Biomass

²⁶ <http://www.aee.md>

²⁷ https://www.eu4energy.iea.org/lists/ieasectiontempli/allitems.aspx?Paged=TRUE&p_ID=295&PageFirstRow=61&&View=%7BF6E877FA-13C2-4829-AA95-94D324B7E0CF%7D

²⁸ <https://www.iea.org/reports/moldova-energy-profile/sustainable-development>

- This renewable source is one of the most promising due to the agricultural background of the country. It is one of the most developed renewable sectors and has already received support from the international community. Between 2011 and 2017, thanks to EU support, more than 100 MW of biomass heating capacity was built with more than 300 boiler units installed through the countryside.

4.4 Waste sector

A) Overview and priorities the sector

While a UNDP report points out that “Greenhouse gas emissions generated by waste are three times higher in the Republic of Moldova than globally” and that the sector requires “urgent intervention”²⁹, the field of integrated waste management in Moldova is only at the incipient stage.

This domain faces multiple challenges, starting with almost non-existent infrastructure, which has stagnated long since the Soviet period and does not meet current environmental requirements. Main key issues include funding shortfalls, developing regulatory framework, inconsistent statistics, all these against the background of an increase in the volume of waste generated.

Being an area that did not benefit from financial sources according to the investment needs, it developed very sporadically and insufficiently. However, with the signing of the Financing Agreement for waste management between Moldova and the EIB in 2019, the opportunity arose to build a system of integrated waste management, in line with EU practices. Thus, the responsibility for waste management activities lies with their generators, accordingly with the “polluter pays” principle or, as the case may be, to producers,

At present, basic waste management services are created mainly in urban areas and less often in rural ones. Even those services, which exist, they do not cover all the processes of the waste management cycle. It is largely only for collection, transportation and storage.

At present, storage is done in a classic way, being important sources of soil, water and air pollution.

About 3 million citizens annually generate between 2,5 and 4,0 million tonnes of waste, almost all of which is, unfortunately, sent to 1,867 landfills.³⁰

Nevertheless, some steps towards the improvement of the waste management system have been taken. Specifically, specialized sanitation services executing municipal waste management exist in all municipalities, regional centres, including small towns within the districts. In rural areas, however, waste is mainly transported to unauthorised waste sites by the individuals who generate it, as proper waste management services there are not organised.

Whilst the generation of municipal waste is influenced by many factors, the most important ones appear to be personal income, consumer behaviour, the appearance of new packaged products on the market and demographic evolution. Greater level of the population’s income accompanied by urbanization resulted in the generation of a larger amount of waste per capita, with the one in rural areas being normally between 0.3 - 0.4 kg / inhabitant / day and the one in urban areas being about 0.9 kg / inhabitant / day respectively (UNEP, 2016). In 2014, the total amount of solid household waste

²⁹ <https://www.md.undp.org/content/moldova/en/home/presscenter/pressreleases/2021/in-republica-moldova--deurile-emit-de-trei-ori-mai-multe-gaze-c.html>

³⁰ Waste and Water Management in the Time of COVID-19: A Tale of Six Countries EaP CSF COVID-19 POLICY PAPER - <https://eap-csf.eu/wp-content/uploads/Waste-and-Water-Management-in-the-Time-of-the-COVID-19.pdf>

generated and collected in both urban and rural areas was 2,437,943 m³, most of which went to 1,158 authorised landfills with a total combined area of 1,235.5 hectares.

According to the “Analysis of Waste Management in the Republic of Moldova: A Comparison of Rural and Urban Area”³¹, although Moldova belongs to a group of developing countries according to its GDP, it ranks among developed countries with its 540 kg average of annual municipal solid waste production per capita. This amount fits into the average of 521.95-759.2 kilograms of annually produced waste per capita in developed countries. Of the total number of landfills approximately 473 landfills could not fulfil the environmental standards. For comparison, the number of Moldovan authorized landfills is twice smaller (around 1.5 thousand) and they face substantial problems such as overloading and sanitation. However, it is especially in waste disposal storage where attention should be brought because of the landfilled waste high share. Less than 2% of waste is recycled and the remaining 98% of all solid waste produced in Moldova ends in storage places even though it contains valuable components such as plastics, glass, paper, or metal.

From the fractional analysis of solid waste produced in Moldovan households, an approximate representation of each component can be seen. Organic waste forms the largest part (55%) of mentioned analysis, followed by plastics (10%), paper (7%), textiles (5%), and others.

There exist several dissimilarities in comparison of waste management in Moldovan rural and urban areas. An inconsiderable difference occurs in the amount of daily generated waste per capita, which is approximately three times higher in urban areas than in rural areas. However, the same rate observed in the capital city Chisinau is even four times higher than the average amount of Moldovan rural areas; concretely 1.3 kg per person per day. Besides, from 60 to 90% of the urban population has access to the waste collection system, whereas only a minimum percentage of the Moldovan rural population is covered by any waste collection, thus most people from rural areas are personally responsible for their waste disposal. Such a marginal contrast between Moldovan rural and urban conditions, all previously mentioned issues, and the fact that there is a lack of scientific articles about the waste management situation in Moldova (the only available literature describing the situation are mainly the reports of GIZ.

B) Legal basis

The **National Waste Management Strategy of the Republic of Moldova**³² states that waste management is still a problematic issue in the country, that should be better organised and for which legislation should be improved. Although environmental protection is governed by 35 legal acts and more than 50 Government Decisions, the regulatory framework for the management of waste is far from being satisfactory, according to the Strategy, which lists the following as the main waste legislation:

- **Law on environment protection**, no.1515-XII of 16 June 1993 [LP1515/1993](#);
- **Law on the ecological survey and estimation of impact on the environment**, no.851-XIII of 29 May 1996 [LP851/1996](#);
- **Law on natural resources**, no.1102-XIII of 6 February 1997 - [LP1102/1997](#);
- **Law on the charges for environment pollution**, no. 1540-XIII of 25 February 1998 - [LP1540/1998](#);

³¹ “An Analysis of Waste Management in the Republic of Moldova: A Comparison of Rural and Urban Areas “, Kateřina Procházková, Tatiana Ivanova, Alexandru Muntean

³² https://serviciilocale.md/public/files/deseuri/2013_01_24_NATIONAL_WASTE_MANAGEMENT_STRATEGY_2013-27_ENG.pdf

- **Law on the regime of hazardous products and substances**, no.1236-XIII of 3 July 1997 - [LP1236/1997](#) ;
- Government Decision no. 1296 of 20 November 2008 on the procedure of charging environmental payments for import of goods which, in the process of use, cause environmental pollution and for plastic and/or tetra pack packaging of imported goods - [HG1296/2008](#);
- Government Decision no. 637 of 27 May 2003, approving the Rule on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and as such transposing the Basel Convention. - [HG637/2003](#)
- **Law on the Production and Consumption Waste** no. 1347 of 09.10.1997 - [LP1347/1997](#) has been replaced by the Law of 29.07.2016 on Waste, which entered into force as of 23 December 2017. The law reportedly aligns the national legislation to EU provisions as stipulated in the Moldova-EU Association Agreement. The law contains among other provisions the adoption of the European List of Waste, but most likely an implementing regulation will be needed to effectively introduce the List of Waste. Until effective implementation of the European List of Waste, the National Bureau of Statistics (NBS) is using the existing national waste classifications. The development of the new Waste Law started more than 10 years ago and its adoption has been announced several times during that period. The NBS has reviewed drafts at some stage and has provided comments, but is however not aware of the content of the latest version, which has been approved, and of its impact on waste statistics.

C) Sector management

The state institutions responsible for: i) waste management at local level are the **local public administration authorities**; ii) **drafting the regulatory framework** - Ministry Environment and the Parliament of the Republic of Moldova; iii) **supervision and control of compliance with environmental legislation** by local economic agents, including in the **waste management process** - Environmental Agencies and Inspections; iv) ensuring the **collection and transportation of solid household waste** - sanitation services, which operate mainly in urban and only in some rural localities. At the same time, local public authorities have an important role to play in waste management, given that the results of waste collection and disposal depend to a large extent on their ability to organise this, and on the way in which economic agents and civil society are involved in raising financial resources.³³

D) Market opportunities

An active actor in the field of waste management in Moldova is **EBRD** which implements the project Moldova Solid Waste Project. The Project aims to improve solid waste management services in the participating Waste Management Regions across the country, establish integrated solid waste management systems and address environmental challenges.

The proposed investment will finance priority investments to improve solid waste management services across the country, establish integrated solid waste management systems in the participating Waste Management Regions in line with Moldova's National Waste Management Strategy (NWMS) and the country's undertakings under the Association Agreement with the EU. The Project is an important step towards sustainable solid waste management services in Moldova.

³³ https://www.environment.md/ro/managementul_deseurilor

The loan will be provided in several tranches. It is envisaged that Tranche 1 will be committed at loan signing and will co-finance investments in Waste Management Region (WMR) 5, which includes Ungheni, Nisporeni and Calarasi Rayons ("WMR 5"). Subsequent tranches will finance WMRs to be proposed by the Moldovan Government and validated by feasibility studies.³⁴

E) SWOT analysis

<p>Strengths</p> <ul style="list-style-type: none"> • Legal framework gradually adapted to EU legislation • Existence of international projects financed by donor organizations • The Association Agreement with the EU includes obligations to improve waste management in the country -> law on waste LP1347/1997 • National Waste Management Strategy 	<p>Weaknesses</p> <ul style="list-style-type: none"> • The country is still not on the track towards transforming its economy from linear to circular model, although efforts have been made. In fact, landfilling still appears to represent the most popular mechanism to handle most types of waste irrespective of their origin or level of hazard they represent • No large-scale waste treatment facility has yet been created • Officially regulated landfills do not align with EU standards in most cases • low level of selective waste collection; • insufficient development of the recycling market and recovery market
<p>Opportunities</p> <ul style="list-style-type: none"> • Many international donors have funded and are still funding projects in order to implement the National Waste Management Strategy, and further more to implement the SDGs. 	<p>Threats</p> <ul style="list-style-type: none"> • The National Environmental Fund is currently only supporting the construction of new water supply systems, not the creation of waste water treatment plants and waste landfills that were originally planned • High disparity between rural and urban areas in terms of waste management <ul style="list-style-type: none"> ○ Causes illegal dumping

4.5 Brief conclusions of the fact-finding mission in Moldova

On 25th of October 2021, in Chisinau, Moldova, Event organised by the French Embassy in Moldova

Title of the event "*LOCAL DEVELOPMENT: WATER-WASTE-INTERCOMMUNALITY* with the participation of relevant *actors* such as: Moldavian officials: Ministry of Agriculture (managing the water sector), Ministry of environment managing the waste sector, mayors and international donors such as: AFD, World Bank, Swiss Fund, European Bank for Reconstruction and Development.

³⁴ <https://www.ebrd.com/work-with-us/projects/psd/52512.html>

The participation into this event, which targeted more the best practices sharing between French organisations and local key actors, was a suitable opportunity to meet the Moldavian key players of waste and water sectors. To find the main issues in these fields but also understand which actors might be responsible for public procurement in the targeted sectors.

Conclusion: Moldova's main infrastructure and sustainable development projects are funded by international donors such as GIZ, AfD, WB, SDC, EBRD and understand their functioning. These donors are financing big infrastructure projects in Moldova which result in Public Procurement offers launched for example by ADR Centru, Nord and Sud agencies.

Other relevant actors to be targeted through the P2GreenEST networking events might be: Apa Canal Cahul, Apele Moldovei , S.A. Salubritate Soldanesti...

5. Ukraine

5.1 General info, access to the market

A) Facts and figures

Capital	Kiev
Population, 2020	42 million
Area	603,700 km ²
Major languages	Ukrainian, Russian
Currency	Hryvnya, 1 EUR = 30,29 UAH
GDP, 2020	\$156 billion
GDP per capita at PPP, 2020	\$3,726
Life expectancy ³⁵	71,8

a) Geography



Image 7 - Political map of Ukraine

With an area of 603,628 km² and a coastline of almost 2,800 km on the Black Sea to the south, the eastern European country of Ukraine is the largest country wholly in Europe, and lies between latitudes 44° and 53° N, and longitudes 22° and 41° E. It shares a border with Belarus, Hungary, Moldova, Poland, Romania, Russia and Slovakia, strategically situated between the EU, Russia and the Caucasus.

The Carpathian Mountains are found in the extreme west, and a smaller mountain range is in the Crimean Peninsula in the south. However, most of Ukraine consists of fertile plains (steppes) and plateaux, with major rivers flowing south into the Black Sea. These plains are some of Europe's best

³⁵ <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=UA>

agricultural land. Indeed, Ukraine has one-third of the world's richest soil, the chernozem, known as the "black earth". As stated in the Doing Business in Ukraine Guide it is estimated that Ukraine, if fully cultivated to Western standards, could feed a fifth of the world's population, increasing its agricultural production by over 500%, to become the world's leading grain exporter and a leading producer of many other agricultural products.

Ukraine has a temperate continental climate with a Mediterranean climate on the Black Sea coast. Precipitation is disproportionately distributed, highest in the west and north, and less in the east and southeast. Winters vary from cool along the Black Sea to cold further inland; summers are warm across most of the country, and hot in the south.

b) Regional structure³⁶

Ukraine is a unitary state divided into:

- 24 oblasts (regions);
- the Autonomous Republic of Crimea (illegally and temporarily annexed by the Russian Federation in 2014); and
- the cities of Kyiv and Sevastopol (each of which is deemed a separate administrative unit; Sevastopol was illegally and temporarily annexed by the Russian Federation in 2014).

Each oblast and both Kyiv and Sevastopol have a governor who is appointed by the President.

The Autonomous Republic of Crimea has its own constitution, Verkhovna Rada (parliament) and government, but remains subordinate to the central Government of Ukraine.

It is anticipated that major administrative and territorial reforms will take place in Ukraine in the medium term.

B) Country overview³⁷

Ukraine has significant economic potential as a result of:

- strategic location connecting Europe, Russia and Asian markets
- well-educated labour force
- large domestic market
- access to a variety of resources, including some of Europe's best agricultural land, significant coal and some oil and gas reserves

It is going through a difficult political transition following Russia's illegal annexation of the Crimean Peninsula and the 'Operation of the United Forces' in Eastern Ukraine.

However, despite the difficult political and economic climate, Ukraine continues to offer opportunities in a broad range of sectors. Many of these involve cooperation with Ukrainian companies and authorities.

³⁶ <https://www.bakermckenzie.com/en/-/media/files/insight/guides/2021/conducting-business-in-ukraine-2021.pdf>, pag.12-13

³⁷ <http://www.ukraine.doingbusinessguide.co.uk/>

a) Political situation

Ukraine is a semi-presidential republic. The head of state and commander-in-chief is the President. The president is elected by popular vote for a five-year term. Ukraine's legislative branch is its unicameral parliament, the Verkhovna Rada. The head of the government is the Prime Minister.³⁸

President of Ukraine: Volodymyr Zelensky.

Ukraine has experienced acute political, security, and economic challenges during the past seven years. Since the “Maidan” uprising in February 2014, the country has witnessed several momentous events, including the outbreak of conflict in eastern Ukraine.³⁹

From 2014 until 2019, the Government undertook key reforms, including: carrying out significant fiscal consolidation, moving to a flexible exchange rate, reforming energy tariffs and social assistance, enhancing the transparency of public procurement, simplifying business regulations, stabilizing and restructuring the banking sector, moving forward on health and pension reforms, and establishing anti-corruption agencies. At the same time, Ukrainians continue to feel that more needs to be done to improve governance. Lack of trust in public institutions remains a fundamental concern for most people.⁴⁰

President Volodymyr Zelenskyy was elected in April 2019 and in July, his Servant of the People Party won the parliamentary elections. The resulting government, as well as the one re-appointed in March 2020, have both committed to an ambitious and wide-ranging reform agenda.⁴¹

Timeline⁴²

1918 - Ukraine declares independence after Russian Revolution.

1921 - Soviet rule established as Russian Red Army conquers two-thirds of Ukraine.

1932 - At least seven million peasants perish in man-made famine during Stalin's collectivisation campaign.

1941-44 - Ukraine suffers terrible wartime devastation during Nazi's occupation.

1945 - Allied victory in Second World War leads to conclusive Soviet annexation of west Ukrainian lands.

1986 - A reactor at the Chernobyl nuclear power station explodes, sending a radioactive plume across Europe.

1991 - As the Soviet Union heads towards dissolution, Ukraine declares independence.

2004 - Orange Revolution mass protests force pro-European change of government.

2014 February - Maidan Revolution ousts pro-Kremlin government over stalled European Union association deal. Russia subsequently seizes Crimean Peninsula and launches insurgency to occupy parts of eastern Ukraine.

2019 April - Volodymyr Zelensky, a comedian and actor with no previous experience in politics, wins presidential election run-off in a landslide victory.

³⁸ <https://www.nationsonline.org/oneworld/ukraine.htm>

³⁹ <https://www.worldbank.org/en/country/ukraine/overview#1>

⁴⁰ idem

⁴¹ idem

⁴² <https://www.bbc.com/news/world-europe-18018002>

b) Economic overview⁴³

Ukraine has a broad (if ageing) industrial base which is strong in ferrous metals and chemicals. This includes much of the former Union of Soviet Socialist Republic's (USSR) space and rocket industry and a well-developed defence and security sector.

Ukraine is a major producer of **agricultural products** such as:

- grain
- sunflower seeds and oil sugar beet
- corn

The EU accounts for about 40% of Ukraine's trade, while the Commonwealth of Independent States (CIS) countries account for about 20%. Ukraine has a major ferrous metal industry, producing cast iron, steel and steel pipe, and its chemical industry produces coke, mineral fertilisers, and sulphuric acid. Ukraine has a broad industrial base, including much of the former USSR's space and rocket industry.

Manufactured goods include:

- aeroplanes
- turbines
- metallurgical equipment
- diesel locomotives
- tractors

Ukraine's transition to an efficient market economy still faces serious political, economic, and security challenges, and reform is still needed. A World Bank Ukraine Growth Study, said that with the pre-pandemic yearly growth rate of 3%, it would take almost 100 years to reach the current income level of Germany and about 50 years to reach the level of Poland.

In recent years Ukraine has made progress in addressing many of its challenges; for instance, land reform is expected to boost agriculture investment and productivity. Prosperity is still held back by low productivity due to low saving and investment rates; over-reliance on commodity-based exports and limited global economic integration, with Ukraine's export structure still highly concentrated in a small number of basic commodities: either metals or farm products; and weak institutions impacted by delayed reforms, rent seeking and weak commitment to rule of law.

c) Macroeconomic overview⁴⁴

Ukraine, a lower middle-income country, has substantial reserves of minerals, ores, favourable agricultural conditions, a well-educated workforce and a strong industrial base.

Since 2016, GDP growth has been about 2%, with a continued upward trend projected until 2020, when the pandemic hit. High external debt, low central bank reserves and lingering expectations of currency devaluation amid banking system fragility and falling bank deposits have left the country vulnerable to shocks, tension in society, and an economy unable to generate the level of savings and investment that would underpin sustainable, rapid socio-economic development. An estimated contraction of 4.5% means COVID- 19's economic impact has been less than in most other countries, but the pandemic has had a heavy toll on households and weakened government commitment to critical reforms. Only a

⁴³ <http://www.ukraine.doingbusinessguide.co.uk/>

⁴⁴ https://ukraine.un.org/sites/default/files/2021-05/UN%20CCA%20Ukraine_April%202021%20%281%29.pdf (pag. 35)

partial recovery in GDP growth of 3.8% is expected in 2021, given high uncertainty regarding rollout of the vaccine and the slow pace of structural reforms to address bottlenecks to investment and safeguard macroeconomic sustainability. Recent anti-corruption reforms suffered setbacks due to adverse court rulings in late 2020. The COVID-19 outbreak redirected government policy from structural reforms towards ad-hoc reactive measures. As a result, macro-fiscal risks have increased. Public sector financial needs are expected to grow due to increases in minimum wages and social transfers, limiting space for public investment, and fuelling inflationary pressures in a supply-constrained economy. Additionally, large government domestic borrowings are crowding out much needed private investment. Holdings of government securities already represent close to 30% of total assets of the state-owned banks while corporate lending continues to stagnate. Stronger fiscal discipline is needed to reduce risks for medium-term growth prospects.

d) Foreign direct investment⁴⁵

FDI in Ukraine decreased substantially after the financial crisis of 2008 and fell more between 2012 and 2014. In 2016, inflows recovered to 3.6% of GDP, but in 2019 they declined to about 2% of GDP, the second lowest share of FDI in the EESC subregion. Most FDI goes to mining, real estate, electricity and gas, finance and ICT.

C) Strengths & Weaknesses⁴⁶

Strengths:

- Strategic position in Europe
- Association and Free Trade Agreement with the European Union (2016), which enables a reorientation of foreign trade
- Significant potential in agriculture, with 55% of arable land (wheat, maize, barley, rapeseed, sunflower, beet, soybeans), and in metals (iron)
- Skilled and low-cost labour force
- Low private debt levels
- International financial and political support, although conditional on reforms

Weaknesses:

- Conflict with Russia and Russian-speaking populations in the Donbass region, which is affecting territorial integrity and preventing EU entry
- Business environment marred by corruption, oligarchy and monopolies, weak property rights, a lack of competition and inefficient public services
- Low economic diversification; sensitivity to weather and commodity prices
- Declining demographics; regional inequalities featuring poverty and the informal sector
- Credit constrained by doubtful loans and high real interest rates

D) Foreign relations⁴⁷

- Ukraine is a constituent member of the UN and various other multilateral organizations, including the IMF, IBRD, IFC, MIGA, EBRD, BSTDB, EIB, OSCE and the Council of Europe;

⁴⁵ https://unece.org/fileadmin/DAM/ceci/icp/Capacity_building/IPO_launch/IPO_2020_FULL.pdf

⁴⁶ <https://www.coface.com/Economic-Studies-and-Country-Risks/Ukraine>

⁴⁷ <https://www.bakermckenzie.com/en/-/media/files/insight/guides/2021/conducting-business-in-ukraine-2021.pdf>, page 6.

- has become party to more than 400 multilateral treaties and over 2,000 bilateral agreements since gaining its independence in 1991;
- joined the WTO in 2008;
- cooperates with the OECD, the European Union and NATO;
- has stated its intention to ultimately join the European Union within the next decade and to continue cooperation with NATO in various areas; and
- has signed and ratified the Cooperation Agreement with NATO, which is now in force.

a) Relations with the EU:

Ukraine seeks to further deepen EU-Ukraine relations. The political part of the EU-Ukraine Association Agreement was signed on 21 March 2014. The economic part of the EU-Ukraine Association Agreement (the “Deep and Comprehensive Free Trade Agreement - DCFTA”) was signed on 27 June 2014 as part of the Association Agreement (“AA”). The DCFTA significantly integrates the EU and Ukrainian markets by banning trade restrictions. The AA entered into force on 1 September 2017.

b) Selected country profiles of Ukraine published by international organizations

- [Amnesty International: Ukraine](#)
Amnesty International is a non-governmental organization focused on human rights.
- [BBC Country Profile: Ukraine](#)
Country profiles by the British public service broadcaster.
- [BTI Transformation Index Ukraine](#)
Ukraine Country Report 2020 by Bertelsmann Stiftung.
- [Freedom House: Ukraine](#)
The U.S. government-funded non-profit organization whose goal is to promote liberal democracies worldwide.
- [GlobalEDGE: Ukraine](#)
Ukraine ranking by the Global business knowledge portal.
- [The Heritage Foundation: Ukraine](#)
Index of Economic Freedom by The Heritage Foundation, an American conservative think tank.
- [OEC: Ukraine](#)
The Observatory of Economic Complexity provides the latest international trade data.
- [Reporters Without Borders: Ukraine](#)
RSF (Reporters sans frontières) is an international NGO that defends and promotes media freedom.
- [The CIA World Factbook - Ukraine](#)
The CIA World Factbook Ukraine Page.
- [The World Bank – Ukraine](#)

5.2 Water sector

A) Overview and priorities the sector

a) Water resources⁴⁸

The availability of water in Ukraine varies greatly on a regional level due to the changing climate in the country. While the humid northwest of Ukraine experiences a yearly average of 600 mm of rainfall, the arid southeast of the country only experiences a yearly average of 360 mm. During long dry periods in summer and simultaneous water withdrawal, the south easterly regions regularly experience a shortage of water.

Generally, the water quality in Ukraine is disproportionately poor. The main causes of water pollution are caused by the direct drainage of or insufficiently treated municipal and industrial wastewater into surface water.

b) Water requirements⁴⁹

The total water consumption in Ukraine is around 15 billion m³/year, of which almost half is attributed to the industrial sector. The highest quantities consumed by far are a strong 3 billion m³ in the energy sector, agriculture (almost 3 billion m³), households and public suppliers (almost 2 billion m³) and the metallurgical industry.

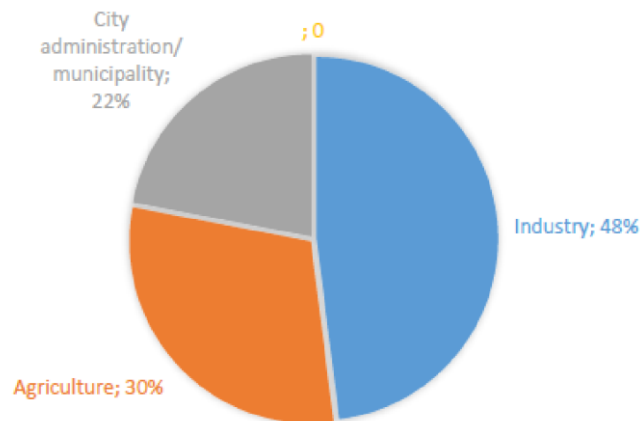


Image 8 - Water usage per sector (in%)

Water supply for small settlements comes from small rivers, lakes, and other water bodies. The current state of rural water supply systems in Ukraine is critical. In most cases, groundwater quality is not satisfactory due to an important concentration of iron and manganese. In urban areas, drinking water quality is threatened by old distribution pipes and outdated treatment plants. In rural areas, pollution of rivers, water contamination, seasonal floods, and water shortages are the main quality issues.⁵⁰

⁴⁸ https://www.retech-germany.net/fileadmin/retech/02_projekte/laenderprofile/Laenderprofile_2016/180719_Laenderprofil_Ukraine_Gesamt_ENGLISCH.pdf, page 41-42

⁴⁹ <https://sos.danubis.org/eng/country-notes/ukraine/>

⁵⁰ <https://niss.gov.ua/doslidzhennya/nacionalna-bezpeka/analiz-aktualnikh-chinnikiv-pogirshennya-yakosti-pitnogo>

c) Wastewater management⁵¹

The access rate to a central wastewater disposal system in Ukraine was around 56% on average in 2012. In cities the average access was 75%. The wastewater access rate in rural areas is very low at 8% on average and demonstrates large regional differences.

In large cities, around 90% of wastewater is mechanically-biologically treated. In smaller cities this method is only carried out in 45% of facilities. In rural regions wastewater treatment is often limited to mechanical primary treatment.

The central wastewater disposal system is known to be only minimally automated, have a large number of employees and have defective or inefficient technology. Following considerable drops in consumption, its facilities are oversized, there is a lack of treatment capacity in wastewater treatment facilities and a lack of possibilities in terms of sewage sludge disposal.

B) Legal basis

The 2020 **national environmental strategy**, passed by the Ukrainian parliament in 2010, is amongst the most important strategies in the water sector. It describes the biggest challenges in the environmental sector in Ukraine and places priority on natural resources.

The 2011-2020 **state programme for drinking water in Ukraine** is one of the most important programmes for water management in the country. It has the goal of ensuring the rights of the Ukrainian population to an appropriate standard of life via the provision of drinking water to a standardised quantity and quality, based on EU standards. The programme is to be financed by the state, local authorities, businesses and international organisations, although the division of costs has not yet been specified.⁵²

The most important programmes concerning the wastewater industry include the **national programme for water management development** and the state programme for reform and development of the municipal housing industry. Both programmes have the aim of de-monopolising the municipal companies in the sector by way of reforming the tariff system as well as structural and economic reforms.⁵³

Two important laws regulate the water supply and wastewater disposal sector in Ukraine:

- The **Ukraine Water Code** (Water Code No. 213/95-VR) from 1995 regulates the water resource management (monitoring, usage, protection and improvement of water resources) -amended in January 2015.
- The 2002 law governing **drinking water and drinking water supply** (Law No. 2918-III on potable water and potable water supply) determines the legal, economic and institutional basis for the provision of drinking water as well as responsibilities on several different administrative levels, in order to safeguard the drinking water supply for the population

In 2014, Ukraine signed the Ukraine-European Union Association Agreement. According to this Agreement Ukraine has to make approximation of the Ukrainian “water” legislation to six EU Directives:

1. Directive 2000/60/EC establishing a framework for the Community action of water policy (Water Framework Directive)

⁵¹ <https://www.retech-germany.net>, page 44-45

⁵² Larive. 2014. *Market Study: Ukrainian Water Sector - Opportunities for Dutch Companies*. Zeist: Larive International

⁵³ DEPA/DANCEE, 2003

2. Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
3. Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources (Nitrates Directive)
4. Directive 98/83/EC on the quality of water intended for human consumption (Drinking Water Directive)
5. Directive 91/271/EEC concerning urban waste-water treatment (Urban Wastewater Directive)
6. Directive 2007/60/EC on the assessment and management of flood risks (The Floods Directive)

C) Sector management

a) Authorities and their responsibilities⁵⁴

The management of water resources is increasingly based on the principle of drainage basin management.

Currently, however, local and regional authorities also have an influence on water resource management in the country.

The management, the use, the protection and the renaturation of water resources of Ukraine are regulated by local village and municipal councils and their executive powers, regional and district administrative bodies, regional state authorities as well as national and local executives.

The sector is controlled at the national level by several institutions. Several ministries and agencies control the water sector at the national level, with no clear line ministry and mandate overlaps.

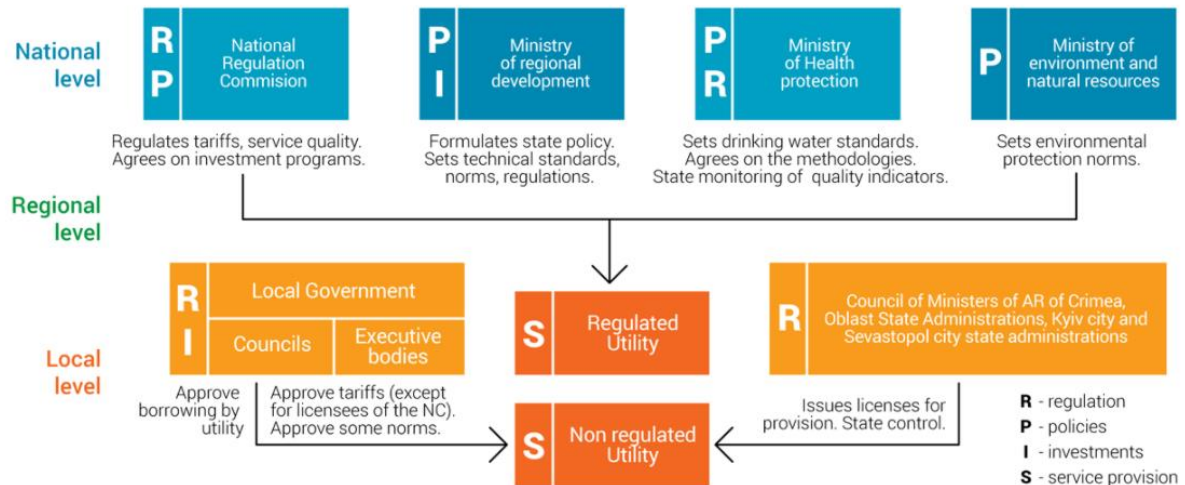


Image 9 - Water services sector organization

⁵⁴ <https://sos.danubis.org/eng/country-notes/ukraine/>

D) Market opportunities

a) Market participants in water management⁵⁵

The market for water collection and treatment in Ukraine is very competitive. A range of local and foreign companies from different areas of the water sector already boast a long history of business in Ukraine.

It is estimated that **60-75% of the water technology is imported into Ukraine**. Because of the product diversity in the water sector and the lack of publicly accessible information, estimating the total volume of the water market is very difficult. The market volume is between €1.2 and 1.5 billion (2013).⁵⁶

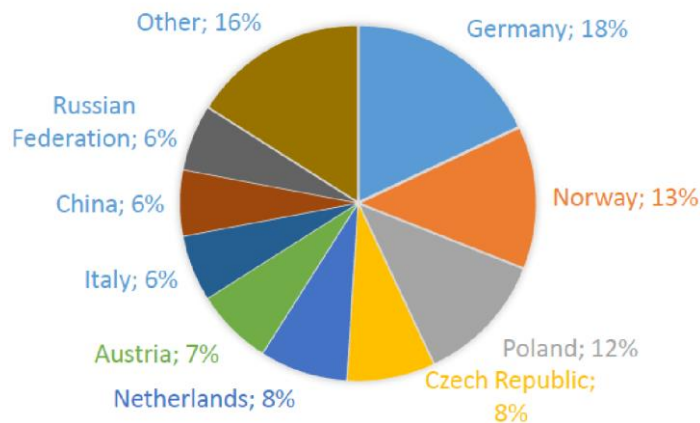


Image 10 - Import distribution of filter and water processing technologies 2015 (in %)

The current **challenges** in Ukrainian water supply and wastewater management:⁵⁷

- High water usage (120 l/head) because of **inefficient water management and huge losses** in water (38%)
- **Low access rate to central drinking water supply** (67%)
- High level of **water pollution** (surface and groundwater), mainly caused by the non-existent or **insufficient treatment of wastewater** from industry and municipalities. This often leads to a regional shortage of water in eastern and southern industrial regions
- **High energy usage** because systems and supply networks are being used that are in great need of renovation
- **Ambiguities in legal framework** conditions and responsibilities of regulatory bodies and inefficient cooperation between regional and local authorities and municipal water management companies
- The **lack of a cost-covering tariff system** to ensure efficiency of the water sector sustainably
- Operational inefficiency due to inadequate education of municipal water supply and wastewater disposal management staff

⁵⁵ https://www.retech-germany.net/fileadmin/retech/02_projekte/laenderprofile/Laenderprofile_2016/180719_Laenderprofil_Ukraine_Gesamt_ENGLISCH.pdf, page 47

⁵⁶ Larive. 2014. *Market Study: Ukrainian Water Sector - Opportunities for Dutch Companies*. Zeist: Larive International

⁵⁷ https://www.retech-germany.net/fileadmin/retech/02_projekte/laenderprofile/Laenderprofile_2016/180719_Laenderprofil_Ukraine_Gesamt_ENGLISCH.pdf, page 55

*b) Opportunities, potential business areas in Ukraine's water sector*⁵⁸

Opportunities offered by international cooperation in river basin management of the cross-border bodies of water in the country and the implementation of the European WFD.

International collaboration on a municipal level also represents a huge business opportunity.

- the capacity development of staff, support for planning, construction management and operating procedures for water and wastewater systems,
- the recording of the existing supply and sewage networks and their state,
- implementing web-based technology for measurements, analyses
- monitoring and procedural processes and the introduction of a cost-covering tariff systems
- there is huge demand for decentralised systems for water supply and wastewater management.

The biggest need for action in the area of water supply concerns, above all, the **renovation of the supply network and the related water losses**. Need for investment in energy-efficient solutions.

There is also a large demand for the **installation of modern filtration technology for drinking water treatment** (membrane technology and ultra-filtration) as well as **quality control** for drinking water.

Considerable business opportunities in the wastewater disposal field can be identified in the

- **renovation** and new development of **sewage facilities**,
- technical and structural increase of **efficiency for processes in sewage** facilities and building of **sludge treatment plants**.

There is also a large demand for

- renovation of pumping stations,
- the use of web-based measuring and control technology for use in plants, and
- the modernisation of measuring devices.

Because of a sustained upward trend in energy prices, there is an increased demand for energy-efficient solutions in all operating processes.

Business potential can also be found in the introduction of mechanisms for monitoring, prosecution and treatment of people who are guilty of discharging within industry and the introduction of wastewater charges.

5.3 Energy sector

A) Overview and priorities the sector

Traditionally, Ukraine has a powerful and developed energy sector, including gas, electricity, hydro, coal and nuclear. Ukraine's way to energy independence, according to Energy Strategy of Ukraine 2035, and recent reforms in the energy sector open new opportunities for global energy players and small investors in Ukraine.

*a) Traditional energy*⁵⁹

- **Gas sector**

⁵⁸ Idem, page 56

⁵⁹ <https://ukraineinvest.gov.ua/industries/energy/>

Natural gas occupies a significant part of the energy mix in Ukraine and currently constitutes 30% of the nation's energy demand. With gas consumption at approx. 30 bcm, Ukraine imports one-third of its total needs.

Given Ukraine's current natural gas production, the proved reserves base is underutilized. The government's recent deregulation efforts in the gas sector and the launch of open auctions of special permits for oil and gas extraction will attract more private companies with advanced technologies and boost gas production in Ukraine.

- **Electricity sector**

Ukraine's electricity sector consists of more than thirty power plants, of which four are nuclear that supply more than half of Ukraine's total electricity needs.

While the government continues to straddle the wholesale power sector as a supplier and owner of the national grid, the distribution sector was set for privatization which provides opportunities for private investors.

b) Renewable energy sector

According to Bazen et al. (2018)⁶⁰ doing business in Ukraine can be challenging, and the energy sector is no exception. It does offer a lot of potential, given the large amount of biomass that is available as well as the climate and the amount of land available for wind and/or solar energy.

With above average wind speeds, solar irradiation and an increasing amount of agricultural waste, Ukraine's renewables sector is poised for rapid growth. Indeed, in recent years a number of global renewables brands entered Ukraine's market which boosted electricity production from renewable sources to 7 565 MW by half of 2021.⁶¹

Ukraine's above-average annual amount of solar irradiation (more than Germany, the industry leader) makes Ukraine an exceedingly attractive producer of solar energy, particularly for existing industrial facilities and the growing agribusiness sector.

From 2018 to 2020, **solar power capacities** have grown almost 5 times, and by 2021 exceeds 78% of all renewable energy capacities in Ukraine.

Most of the country's renewable energy today is concentrated in **hydropower** and **biomass-fired heating boilers**. There are also several wind power plants and geothermal heating systems. (Bazen et al., 2018)

At present, Ukraine generates just 4% of its electricity from renewable sources other than hydroelectric power, and the market opportunities for investors are in practical terms, limitless, given the country's stated desire in the National Energy Strategy, to increase the renewables mix to 25% by 2035. This ambitious strategy will require significant investment in the development of power storage capacity to reduce losses to the grid and imbalances between supply and demand.

DTEK Wind Power, the renewables arm of the local energy giant, and Wind Parks of Ukraine, which additionally builds equipment under licence from German supplier, Fuhrlander Windtechnology, dominate the Ukrainian wind power market. In the solar renewables sector, CNBM New Energy Engineering, and Rengy Development are the largest suppliers, controlling almost one third of the market. In both wind and particularly solar, outside of the key players, whose growth plans have thus far been largely organic, the market is fragmented and characterised by smaller operators and start-ups, many of whom have yet to generate their first megawatt.

⁶⁰ Bazen, J. C. (Jacques), Bazen, I. S. (Irina S., Elbersen, W. (Wolter), Klink, van H. (Hans), & Lesschen, J. P. (Jan P. (2018). *Trends and developments in the renewable energy sector in Ukraine*. Saxion University of Applied Sciences.

⁶¹ idem

Ukraine plans to increase energy from renewable sources from 4% in 2015 to 12 per cent by 2025 and to 25% by 2035. This growth is dependent on necessary developments to the regulatory environment and access to international finance. Growth so far has been driven in large part by the adoption of a Green Tariff, introduced in 2008, which guarantees prices until the end of 2029 for electricity from renewable sources, brought online before the end of 2019.

The government stopped importing gas from the Russian Federation in November 2015 and has since relied on local production, supplies from Europe and other fuel sources for power and heat generation.

Driven both by the necessity to seek alternative energy supplies and by a desire to capitalise on its undoubted natural advantages, Ukraine is carving out a niche as a destination for investment in renewable energy, and in particular, wind and solar power.

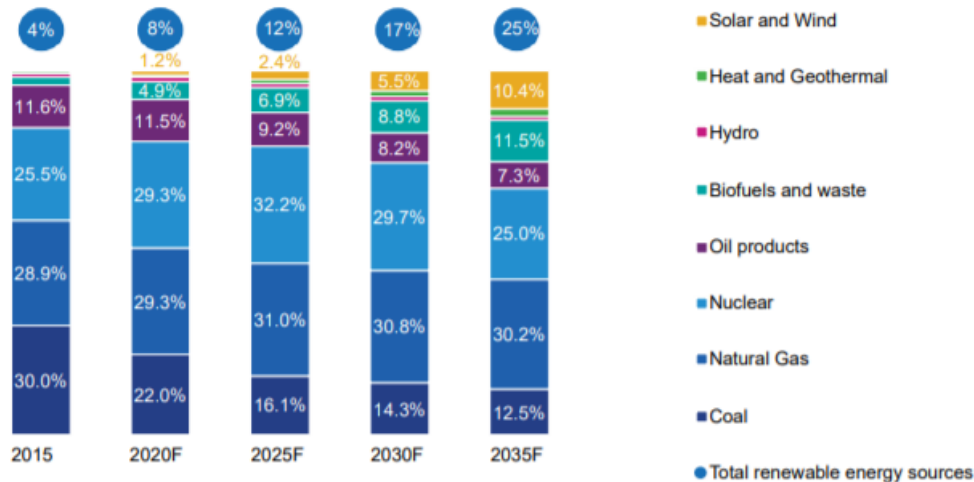


Image 11 - Forecast structure of Ukraine's energy supply

c) Biomass-to-energy market⁶²

The supply side of the market is represented by the forestry and wood processing companies and crop and animal farms that are sources of biomass. Pellet producers process available waste into pellets. Boilers for burning biomass are available in the market from either local producers or importers.

Biomass-to-energy facilities produce electricity and/or heat for a variety of users (industrial, commercial, and residential). In some cases, users generate electricity and/or heat for their own use. In others, (private or municipal) electricity/heat producers sell to end-users directly or through the power grid. Biomass-to-energy facilities may use biomass only or in combination (co-fired) with other fuels (oil, gas, or coal).

The demand side is represented by biomass-to-energy facilities:

- Companies or individual users that burn biomass to produce energy (electricity or heat) for in-house consumption. This segment includes industrial companies, crop and animal farms, individual households, schools, and hospitals which install biomass-burning boilers to receive energy. They may use own-sourced biomass or procure it, particularly from pellet suppliers.

⁶²https://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/Ukrainian%20Energy%20Market_0.pdf

- Private and municipal heat suppliers. The former install biomass boilers and sell heat to customers such as schools, hospitals, and small industrial plants. The latter use biomass boilers together with traditional fuel (mainly, natural gas) boilers to reduce the cost of energy.
- Electricity generators. These companies implement projects with the objective of selling electricity to the national grid. For instance, animal farms process biomass into biogas and sell electricity to the grid.

The Ukrainian biomass-to-energy market is rather fragmented. There is a lack of established links in the market between players, which prevents it from smooth functioning.

The most robust segment of the market is that of municipal heat supply. Heat-supplying companies, both municipal and private, are the most active users of biomass for energy generation:

- More than one third (36%) of the heat-supplying companies use biomass boilers. Most of them run both gas and biomass boilers. Combined usage of traditional fuel and biomass (co-firing) is very rare among those polled.
- Another 27% of the total number of heat suppliers have designed a project to install biomass boilers.

Demand for biomass-to-energy initiatives has been growing in Ukraine, being driven by the motivation of cost savings and increased efficiency. In the short term, the share of heat suppliers using biomass boilers could grow up to 63%. Despite the expanding share of municipal heat suppliers using biomass boilers in the total number of companies, the share of biomass in the overall volume of fuel consumed by the entities remains low (14%). The most common fuel is natural gas, with a share of 80% in the total volume of fuel used by municipal heat suppliers.

Competition is intensifying in the heat-supplying segment of the biomass-to-energy market. Nearly a quarter (23%) of the municipal heat suppliers have reported cases of clients switching off the heat supply after installing their own biomass boilers. Schools, hospitals, and other social institutions are those most frequently named for discontinuing municipal heat supply and installing their own biomass boilers. These entities are also the most common clients for private heat suppliers using biomass.

Private heat suppliers have been actively entering the biomass-to-energy market. They install and operate boilers generating heat to be delivered to clients (usually schools, hospitals, and small businesses).

Another important segment of the biomass-to-energy market is industrial enterprises using biomass to produce energy for in-house needs. According to the survey of pellet producers, about 20% of their sales go to industrial enterprises. As a result, industrial enterprises and private heat suppliers are the key domestic customers of pellet producers in Ukraine.

The current biomass supply in Ukraine is unbalanced, which may lead to an even greater biomass shortage in the future. Wood, including raw wood, unprocessed wood, and wood pellets, is the main type of biomass currently used in Ukraine. The usage of agricultural waste is limited. This imbalance creates the risk of unsustainable forest management and regional limits in implementation of biomass-to-energy projects (they are mainly implemented in regions with greater availability of wood).

Adjustment of the supply of biomass to meet the growing demand for it will require:

- Investments in collection and treatment of biomass, its storage, and logistics at all levels of the supply chain, including raw biomass suppliers, and
- Closer links and cooperation between market players, particularly among the agricultural companies and pellet producers.

B) Legal basis⁶³

Among the legislation and policies guiding the development of Ukraine's energy sector are

- the National Action Plan on Energy Efficiency,
- the Ukraine Energy Strategy for 2030,
- the National Plan on Renewable Energy,
- the Intended Nationally Determined Contribution submitted in 2015.

Under the National Action Plan on Energy Efficiency, an energy services company (ESCO) module was launched for the **purchase of energy for public buildings**. As of end of 2017 about 180 ESCO tenders for public buildings in 19 cities of Ukraine were issued via the online public procurement system, where the main criterion of energy efficiency of the final product was applied and another 250 public tenders in 2018.

The Energy Strategy of Ukraine until 2035 (ESU 2035)

In 2017, the government adopted the ESU 2035 as part of its efforts to promote a more systematic and holistic approach to energy sector reform. The strategy envisions a sectoral transformation that will improve Ukraine's energy efficiency, security, competitiveness and integration with the EU energy space.

C) Sector management

a) Key players in the field of Biofuels and Waste⁶⁴

Biofuels and waste have been used primarily in heat production, with over 80% of the output consumed by the residential sector. Among biomass energy producers, SEC Biomass Ltd. and SALIX Energy, both privately owned, represent key domestic players in Ukraine. Meanwhile, Siemens Ukraine, a subsidiary of Siemens AG, is an important foreign player in this energy segment. Following production, biomass materials are transformed into solid, liquid or gas biofuels, a process that is conducted by numerous Ukrainian firms, including Almaz-M, ECO PRIME Co. Ltd., and SALIX Energy. Subsequently, biofuels are converted into heat in more than 30,000 boilers and boiler houses throughout Ukraine. Boilers and boiler houses are constructed by companies such as Kriger Energy Holding LLC, Volyn-Kalvis LLC, Lika-Svit LLC, and KB Energomashproekt.

D) Market opportunities

Investors looking to enter the Ukrainian market have two options: either invest into existing projects benefiting from the Green Tariff, or invest into projects that will operate under the new Auction Law.⁶⁵

The Auction Law, introduced in April 2019, has the following key features:

- From 2020, solar power plants with a generating capacity exceeding 1MWp and wind plants exceeding 5MWp (unless operating three or fewer turbines) must take part in auctions. Those plants subject to the grandfathering rule are excluded from these requirements.
- Auctions will use the ProZorro platform. Bidders will submit closed bids which contain a technical bid (noting the capacity bid for) and bid price (per kWh) with the key criteria being

⁶³ Geoff, U. (n.d.). *OECD Monitoring of the Energy Strategy of Ukraine until 2035*. 74.

⁶⁴ <https://www.oecd.org/eurasia/competitiveness-programme/eastern-partners/Snapshot-of-Ukraines-Energy-Sector-EN.pdf>

⁶⁵ <https://home.kpmg/content/dam/kpmg/ua/pdf/2019/08/Renewables-in-Ukraine-Report-2019-en.pdf>, page 14

price. Auction prices may never exceed those paid on the Green Tariff. These prices will be valid for 20 years from the date of commissioning of the power plant.

- Bidders must provide a bank guarantee equivalent to EUR5,000 for every 1MWp bid for, before the start of the auction and a further €15,000 for every 1MWp as a performance bond, if they win the auction.
- The introduction of wind and solar power into the system is likely to create imbalances, as output is dependent on weather conditions. Nevertheless, winning bidders will bear limited or no liability for imbalances between 2020 and 2030 if their projects are commissioned prior to the introduction of a liquid intra-day market or 2024, whichever is sooner.
- There will be no retrospective legislative changes for power plants commissioned before 2020.
- The Green Tariff will be reduced by 25% for solar plants in 2020 and a further 2.5% annually between 2021 and 2023. For wind plants the reduction will be 10% in 2020 with no further annual reduction. The Green Tariff will be further reduced for solar and wind projects commissioned from 1 January 2024.

In terms of renewable energy in Ukraine, it might be worthwhile to look for **business partners** among the members of the:

- Bioenergy Association of Ukraine <http://uabio.org/en/events/events>
- Biomass Sec <http://biomass.kiev.ua/en/>
- Association of Alternative Fuel and Energy Market of Ukraine www.apeu.info
- Ukrainian Agrarian Confederation <http://agroconf.org>
- Ukrainian Agribusiness Club <http://ucab.ua/ua>
- Ukrainian Committee of the International Chamber of Commerce (ICC Ukraine) <http://iccua.org>
- Kyiv International Energy Club Q-club www.qclub.org.ua
- Energy Association of Ukraine www.eau.org.ua
- Ukrainian Wind Energy Association www.uwea.com.ua
- Association of Energy Efficient Cities of Ukraine <http://www.enefcities.org.ua/uk>
- European-Ukrainian Energy Agency <http://euea-energyagency.org>
- National Ecological Centre of Ukraine <http://en.necu.org.ua>
- Ukrainian Network of Environmental Innovation Greencubator <http://greencubator.info>

E) Obstacles ⁶⁶

Key factors related to implementation of RED in Ukraine in the Ukrainian energy sector as a strategic branch, prone to all kinds of risks, which are inherent to it ranging from fluctuating oil prices to development of different pipelines in Europe and development of renewable sources. Moreover, being state governed, the energy sector is closely monitored like no other industry — that's why it is **subject to all kinds of political risks**. The main mechanisms of state regulations are directive tariffs and direct operational administration.

The major problem of the Ukrainian energy industry is **under-budgeting**. The state and government consider the sector not a sphere of business but rather a **part of state infrastructure** and a source of increasing the state budget.

⁶⁶ Bazen, J. C. (Jacques), Bazen, I. S. (Irina S., Elbersen, W. (Wolter), Klink, van H. (Hans), & Lesschen, J. P. (Jan P. (2018). *Trends and developments in the renewable energy sector in Ukraine*. Saxion University of Applied Sciences.

There is development in terms of legislation in most areas aiming to stimulate the energy transition, but unfortunately new laws are not always properly implemented, giving possibilities for less than fair business practices. Besides that, the currently underdeveloped market offers difficulties for investors as well as that there are mainly old and therefore **less efficient equipment and production facilities**, which are in need of serious reconstruction, and, of course, extra investment. Another problem is the wide-spread **pollution**, which can be a big trouble for investors and entrepreneurs, who will be obliged to pay for clean-up of sites. Furthermore, there is the problem of **regional power company monopolisation**, all of which are the property of a small number of Ukrainian businessmen.

At the same time, the (political) situation in the country is not so stable and this high uncertainty, makes any long-term-oriented project too risky for entrepreneurs. Besides these barriers in legislation and economic and societal structure, there are several more technical barriers that limit the implementation of effective energy transition to more renewable sources.

The major **technical barriers** in implementation of the Renewable Energy Directive in Ukraine deals with the underdevelopment of the Ukrainian biofuel market. At present, only separate elements of the biofuel market exist, for instance, Ukrainian biofuel portal (pellets/briquettes trade); Commodity Exchange «Ukrainian Interregional Specialized» (first attempts of pellets trade in 2017); electronic system for public procurement ProZorro (trade in fuel wood, straw, pellets, briquettes). However, in all these cases it is a trade of relatively small amounts of biofuels, and there is no general system that can provide bioenergy plants with the required quantity of fuel at any time.

The price of agro-biomass is a problem too. Due to a small number of suppliers and the absence of competitiveness, owners (producers) of biomass can fix the price and then raise it at their own discretion; at that, a purchaser will not be able to influence the situation.

Risks: Taking care about risks while investing in Ukraine is however necessary. Some recommendations according to Bazen et al. (2018)

- Thorough business planning: make a proper risk evaluation when planning business in Ukraine
- Invest in personal relations: Business has to be done only with a trustworthy Ukrainian partner
- Understanding of cross-cultural differences and the language barrier – there are many differences with other European countries (especially with Western Europe).
- Weakness of hryvnia is generally positive for foreign investors bringing in Euros or Dollars, although there is a risk of “import-inflation”.
- Changes in legislation in Ukraine and the specifics of the business environment, has to be known before starting to invest in the Ukrainian market.

5.4 Waste sector

A) Overview and priorities the sector

Ukraine lags well behind in terms of waste prevention, reuse, and recovery. Indeed, despite a territory of 603,628 km² and a population of 44.03 million people, Ukraine has only 2 incineration plants, 15 waste separation plants, and no waste processing plants, so large amounts of waste are still buried in landfills. Consequently, the waste sector is characterized by the general accumulation of waste in both the industrial and domestic sectors, the **improper treatment and disposal of hazardous waste**, the

storage of household waste without considering possible hazardous consequences, and the **inadequate use of waste as a secondary raw material**.⁶⁷

95% of waste is buried in landfills with no processing, the accumulation of waste is unsustainable, the treatment of hazardous waste is inappropriate, and the use of waste as a secondary raw material is insufficient.

The waste market is just developing, and despite some challenges (e.g., complex and imperfect legislation limiting enforcement of environmental legislation in the waste sector and the establishment of public private partnerships, economically unjustified tariffs for waste collection and processing with a resulting underdeveloped market for recycled materials, and lack of awareness in the population about separate collection even for the most hazardous items), the country has the large potential to increase waste recovery rates. However, the regulatory framework, and in particular approval of the National Strategy for Waste Management Until 2030, is driving the country, with difficulties, to the preliminary stages of a transition toward a more sustainable management of waste.⁶⁸

In general, the waste management market in Ukraine is characterized by the following **challenges and trends**:⁶⁹

- Accumulation of waste both in the industrial and domestic sectors, which adversely affects the environment and human health. However, proper management of possible dangerous consequences is not in place;
- Inadequate disposal of hazardous waste;
- Poor use of waste as a secondary raw material due to imperfection of organizational and economic bases of its application in production;
- Inefficiency of introduced economic instruments in the field of waste management, such as low tariffs and no incentives for effective waste management, waste recycling and the circular economy both for the population and business;
- Lack of or limited responsibility of waste producers and authorities;
- The substantial unofficial market which is not taken into account by the official statistical data on waste generation and management;
- Non-transparent and unreliable statistical data from the official sources;
- The legislative and institutional environment is in the transition mode toward development and implementation of an integrated waste management approach and compliance with the EU standards including elimination of the current discrepancies in the Ukrainian and international/ EU definitions and classifications;
- Massive long-term, however rather uncoordinated, support through project initiatives from international donors, financial institutions and foreign governments for institutional, legislative and B2B waste management market development in Ukraine.

B) Legal basis

In 2014–2017, Ukraine made initial important steps to change the situation through commitment to comply with the EU Directives as part of the Association Agreement with the EU and adoption of the [National Waste Management Strategy until 2030](#). In addition to the national policy framework,

⁶⁷ Morone, P., Sica, E., & Makarchuk, O. (2020). From waste to value. In *Innovation Strategies in Environmental Science* (pp. 1–32). Elsevier. <https://doi.org/10.1016/B978-0-12-817382-4.00001-0> in <http://dlf.ua/en/ukrainian-national-waste-management-strategy-until-2030-approved/>

⁶⁸ Idem, page 28

⁶⁹ <https://www.rvo.nl/sites/default/files/2019/02/Waste-management-in-Ukraine.pdf>, page 11

according to the Association Agreement with the European Union, Ukraine's national environmental legislation should be aligned with certain EU directives and Regulations.

In the waste management sector, the requirements cover implementation of the following EU Directives:

- [Waste Framework Directive 2008/98/EC 'On Waste'](#);
- [Directive 1999/31/EC](#) as amended by Regulation (EC) 1882/2003 'On the Landfill of Waste'; and
- [Directive 2006/21/EC amending Directive 2004/35/EC](#) 'On the Management of Waste from Extractive Industries'.

In addition, [Directive 2010/75/EC](#) (with recent amendments) 'On Industrial Emissions (Integrated Pollution Prevention and Control)' should be implemented and some provisions of the Directive are applicable to the waste sector as well.

C) Sector management

Ministry of Ecology and Natural Resources (MENR)

Leading ministry for the development of waste legislation, monitoring of compliance with laws, supervision of authorities that operate licensing for recycling services and monitor the technical, health-related and environmentally relevant aspects of facilities, monitoring the waste and facilities register made by municipalities, authorising cross-border transfer of waste.

Ministry of Regional Development, Construction, Housing and Municipal Services (MinRegion)

Supervising the implementation of waste policies on a municipal level, passing of guidelines, provisions and standards for the implementation of municipal waste disposal.

Municipalities

Responsible for collecting, recycling and safe disposal of municipal waste within their area, authorising charges for the collection of municipal waste, contracting private third parties for waste disposal, managing a waste registry (generation, recycling and treatment), managing a facility registry with entries regarding disposal facilities and landfills.

D) Market opportunities⁷⁰

a) Disposal companies

In Ukraine, there are more than 1,000 companies that collect and dispose of municipal waste. Around 75 % of them are joint ventures with public and private owners; 25 % are purely private companies. Most well-known: UMWELT, Veolia Ukraine, AVE etc. Amongst the market leaders are also a host of Ukrainian companies that were established over the past 20 years. For example, the companies Ekovtor-Trans, Grinko and PJSC Kiespetstrans from Kiev as well as the company A-MUSSON from Sumy. As well as traditional disposal companies that collect, prepare and dispose of municipal, commercial

⁷⁰ https://www.retech-germany.net/fileadmin/retech/02_projekte/laenderprofile/Laenderprofil_2016/180719_Laenderprofil_Ukraine_Gesamt_ENGLISCH.pdf, Page 32-36

and industrial waste, there is a whole variety of companies active in Ukraine that work on the collection, preparation and marketing of recyclable materials.

b) Environmental technology companies

Recycling businesses

More details about market landscape, main players, institutional and private stakeholders can be found in the Final Report Waste Management in Ukraine Opportunities for Dutch Companies.⁷¹

c) Business prospects

The need for services, facilities and equipment in Ukrainian waste management – especially in municipal waste – is enormous and persistent across the entire value chain from the collection, sorting, preparation and recycling to disposal of the waste.

In many regions, outdated fleets and container systems for waste collection are still being used. The fact that only around 70% of the population has access to public disposal highlights the potential for suppliers of collection systems. The efforts to introduce the separate collection of recyclable material and residual waste in other municipalities is also proof of the business opportunities presented for suppliers of the relevant technology.

There is still accumulated demand in the sorting field, where requirements in the form of a sorting tariff must still be created. A packaging tax or fee is currently being discussed in the relevant ministries, with the involvement of the disposal management industry, which should help to finance the separate collection and sorting of recyclable waste. The private disposal management industry favours a participation fee for packaging brought into circulation which will be managed by an association or a foundation. The relevant organisation will then organise and put out to tender the collection and sorting.

In the waste disposal industry, business opportunities present themselves in the remediation and reinforcing of existing landfills, in gas collection and conversion into energy, and in building new landfill sites with suitable sealing as well as gas and leachate collection systems. The demand for cost effective and useful solutions is huge, as landfills are overflowing, outdated and in need of decontamination.

Opportunities:

- Planning and engineering companies,
- service providers in the waste management industry and
- suppliers of containers, vehicles and preparation or sorting facilities,
- companies from the fields of landfill remediation and exploitation of landfill gases

E) SWOT analysis ⁷²

⁷¹ <https://www.rvo.nl/sites/default/files/2019/02/Waste-management-in-Ukraine.pdf>, page 32-38

⁷² <https://www.rvo.nl/sites/default/files/2019/02/Waste-management-in-Ukraine.pdf>, page 54-56

<p>Strengths</p> <ul style="list-style-type: none"> • The market is large in terms of short-, mid-and long-term development and investment needs in all waste streams including MSW • Recently approved National Waste Management Strategy 2030 with clear strategic targets for short-, mid- and long-term waste infrastructure development • Fixed Ukrainian government commitment regarding alignment of the local waste legislation with requirements of the Association agreement with the EU • Continuous support to the institutional and business environment's development from international financial institutions, donors and foreign governments including development of strategic and legislative documents, elaboration of new ways of working, funding of reformation groups, pilot initiatives at the regional, municipal, public and NGO levels 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Low enforcement of legislative and normative requirements, historically low and inefficient penalties, limited responsibility of companies, consumers, producers (no EPR) and competent authorities for their agreements and fulfilling obligations on waste services for the population and companies • Low affordability of tariffs for the population is a political issue, with low tariffs on waste services ruining the economic base of the market's functioning and the implementation of innovative investments at all stages of the value chain • A significant unofficial sector: 60% of MSW is used in the shadow economy and only 10% is under control • Insufficient financing from the state and private sources, IFIs; lack of PPP; absence of incentives; imperfect mechanism of state guarantees for regional borrowing • Lack of intermunicipal cooperation, which limits investment implementation, decreases financing attractiveness and affects quality of services • Undeveloped infrastructure monopolized by municipal companies; the imperfect tender procedure for waste management services • An insufficient amount, an unstable inflow and poor quality of materials for recycling due to the low level of separate waste collection • Lack of reliable statistical data and reporting systems at all levels • Absence of effective programs and lack of campaigns aimed at environmental education and waste management awareness
<p>Opportunities</p> <ul style="list-style-type: none"> • Technical assistance (TA) and private investment project opportunities related to the Ukrainian vector toward the association with the EU and the implementation of the recently adopted National Waste Management Strategy until 2030: • Pilot/ demonstration projects on a regional level • Equipment/ technologies opportunities: <ul style="list-style-type: none"> • New or second-life balers and transport vehicles • Vehicles for glass and other recyclables collection • Introduction of optical sorting systems • Construction of big capacity sorting lines • Turners and all necessary equipment for composting • Turn-key technological solutions for specific waste collecting points with specific waste streams and specific morphology • Innovative techniques for extraction of gas from landfills (allowing faster gas extraction) • Lining and capping for landfill arrangement 	<p>Threats</p> <ul style="list-style-type: none"> • Controversial lobby in the Parliament and risks of substantial changes in draft laws at the stage of governmental approval and the final stage prior to adoption; low level of coordination between executive and Parliament decision makers • Inconsistent actions of governmental authorities at national and regional levels in terms of implementation of the National Waste Management Strategy; uncertainties related to the coming 2019 elections and corresponding changes in all Parliament and governmental structures • Insufficient commitment and slow progress in adaptation of the Association Agreement requirements

6. Practical info on Public Procurement

6.1 European and international framework

A) WTO Agreement on Government Procurement (GPA)

The **WTO Agreement on Government Procurement (GPA)** is the pre-eminent international instrument regulating the conduct of international trade in government procurement markets. It aims to ensure **fair, transparent and non-discriminatory conditions of competition** for purchases of goods, services and construction services by the public entities covered by the Agreement. It also serves broader purposes of promoting good governance, the efficient and effective management of public resources, and the attainment of best value for money in national procurement systems. The GPA is a binding international treaty based on the principles of **non-discrimination, transparency and procedural fairness**.

These three principles are reflected in the following main elements of the **Agreement's text**:

1. **national treatment and non-discrimination** — for covered procurement.
2. **minimum standards regarding national procurement procedures** - these provisions codify recognized international best practices in the area of government procurement
3. **transparency of procurement-related information**.⁷³

B) EU Deep and Comprehensive Free Trade Area (DCFTA)

The Association Agreements with the European Union, including the DCFTAs, are substantially changing the business environment landscape in Georgia, **Moldova** and **Ukraine**. These agreements are set to enhance cross-border economic activities with benefits to consumers, **businesses** and **public sector**.

First approved in 2015, the DCFTA Facility originally included three phases. The second and third phases have since become one, organised in four windows:

- facilitating DCFTA related investment through enhanced **SME access to financing**
- short- and medium-term trade **financing access for businesses**
- **providing business advice for SMEs**
- and **boosting policy dialogue**.⁷⁴

C) Green public procurement, sustainability aspects

a) Sustainable Development Agenda 2030⁷⁵

Sustainable Public Procurements belongs to the 2030 Agenda for Sustainable Development, which is a program of global actions in the field of development having a universal character and which promotes the balance between the three dimensions of sustainable development – economic, social and

⁷³ <https://e-gpa.wto.org/fr/GPAInBrief>

⁷⁴ https://ec.europa.eu/eu-external-investment-plan/projects/eu-deep-and-comprehensive-free-trade-area-dcfta-facility-phase-2_en

⁷⁵ https://statistica.gov.md/public/files/SDG/docs/Targets_UNU_EN.pdf

environmental. The 2030 Agenda for Sustainable Development includes 17 Sustainable Development Goals (SDGs),



The **Goal 12** aims responsible consumption and production and includes the concept of **sustainable public procurement**. By buying low-impact goods, services and works, public authorities make a significant contribution to achieving local, regional, national and international sustainability goals. Thus, green public procurement is an important promoter of innovation, providing the industry with real incentives for the development of green products and services.

Green public procurement means lower costs for public authorities - especially if the costs of a lifetime contract of products are considered, and not just the purchase price.

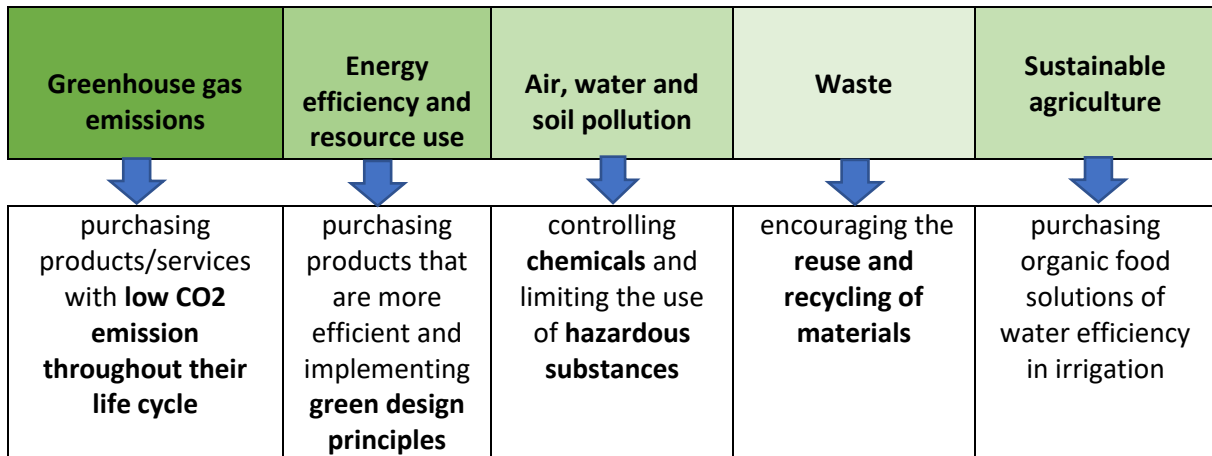
Purchasing **energy-efficient** or **water-saving products**, for example, makes a significant contribution to reducing utility bills. Reducing hazardous substances in products reduces waste disposal costs. **Authorities implementing green public procurement are better able to meet environmental challenges, for example to reduce greenhouse gas emissions or move to a more circular economy.**

The impact of sustainable public procurement may be environmental, social, economic and political.

Impact on the environment	Social impact	Economic impact	Political benefits
<ul style="list-style-type: none"> • Climate change; • Water use; • Energy; • Waste. 	<ul style="list-style-type: none"> • Respecting of human rights; • Fair remuneration; • Equal opportunities/accessibility; • Social inclusion. 	<ul style="list-style-type: none"> • Life cycle costs; • Innovation; • Development; • Employment 	<ul style="list-style-type: none"> • Effective way to demonstrate the public sector's commitment to the environment; • increase people's confidence in government.

b) Green public procurement

The sustainable public procurement can be essentials in environmental issues, such as:



1. Sustainable public procurements provide an example for private consumers.

Green purchasing is an example for the public and private sector, influencing the market and can encourage the private sector to use green criteria for their own procurement.

2. Sustainable public procurement stimulates industry to innovate

Promotion of green procurement provides important stimulants for industry to develop "green" technologies and products and promote them on the market. In particular, small and medium-sized companies can take advantage of environmental procurement as it provides an opportunity to find markets for their innovative solutions and products.

3. Sustainable public procurements can reduce prices for the environmental technologies.

The introduction of "green" tender criteria can influence the market and lead to new entrants in the field of environmental technologies and products – which can lead to increase competition and reduce prices.

In order to implement **sustainable public procurement**, it is crucial to have a knowledge of the public procurement process based on legal norms and international best practices. A policy of sustainable public procurement may not be successful if it is not implemented carefully or does not take into account the legal provisions related to the use of public procurement procedures, criteria that may be applied or evaluation method and verification of environmental criteria. When starting sustainable public procurement, the following aspects are relevant:

- The **principles governing public procurement**.
- The **law governing the award process**.

Therefore, having a conclusive legal framework for public procurement, it is the responsibility of contracting authorities at the institutional level to adopt policies for implementing sustainable public procurement taking into account the 2030 Agenda for Sustainable Development.

c) Tender platforms:

Project tenders can be found on various local and international portals.

Projects are also advertised on the websites of international financial institutes. It is worth, for example, visiting the websites of the European Bank for Reconstruction and Development (EBRD) on a regular basis: <https://www.ebrd.com/who-we-are.html>

- Gtai database "Internationale Ausschreibungen" (International Tenders) (<http://www.gtai.de/GTAI/Navigation/DE/Trade/Projekte-Ausschreibungen/ausschreibungen.html>)
- EU tenders database TED (<http://ted.europa.eu/TED/main/HomePage.do>)
- EuropeAid tenders database (<http://europeaidcontracts.com>)
- dgMarket tenders database (<http://ausschreibungen.dgmarket.com/>)
- https://www.tendersontime.com/advance_search/
- <https://smarttender.biz/en/public-procurements-prozorro/>
- <https://www.tendersinfo.com/global-ukraine-tenders.php>
- <https://www.globaltenders.com/tenders-ukraine.php>
- <https://www.opentenders.online/>
- <https://www.tenderdetail.com/ukraine-tenders>

It has to be noted that some of these platforms, although very useful, are proposing paid services.

6.2 EaP countries and Public Procurement

International markets and the public procurement sector represent huge opportunities for SMEs in the Eastern Partnership region. However, they face high barriers and risks in entering those markets due to **lack of information about export opportunities, internationally incompatible quality standards, and discriminatory rules, as well as complex application procedures for public tenders**. Since the 2016 assessment, the public procurement regulatory environment has improved, but none of the EaP countries has yet fully introduced all the standard practices recommended in this area – and e-procurement systems, despite having considerably developed since 2016, remain limited. The EaP countries have made some progress in the Standards and technical regulations dimension, as they have all applied for associate membership in the European co-operation for Accreditation (EA) and Belarus, Georgia, Moldova and Ukraine have signed bilateral recognition agreements with the EA. Since 2016, all EaP countries have also started implementing new strategies for SME internationalisation, but only limited progress has been made in implementing policies to foster SME integration into global value chains. The EaP countries should improve their e-procurement systems and invest in training for procurement officers and contracting authorities, as well as expand financial and nonfinancial measures to foster the use of standards and conformity assessment services. Finally, they should expand the range of provided export support services and introduce the provision of trade finance tools for exporting SMEs.

The EaP region perfectly encompasses every type of public procurement system in just 6 countries. Some countries of the region have a decentralized electronic public procurement system, others have centralized or mixed systems. Some countries have completely electronic procurement procedures, whereas others still use paper-based procurement or try to use both mediums. Three EaP countries (Moldova, Georgia, Ukraine) are moving towards the EU and have an obligation to adopt its procurement rules and practices. Armenia and Belarus are a part of another union, the Eurasian Economic Union (EEU), with its own procurement regulations and shared practices. In the meantime, Azerbaijan has a path of its own in terms of reformulating the Public Procurement Legislation (PPL), as it tries to adjust to new economic realities with the oil prices plummeting. At the same time, three EaP countries (Moldova, Ukraine and Armenia) have joined the WTO GPA and have to fulfil additional obligations to harmonize their PPLs with the WTO GPA rules.

There is a significant difference in levels of transparency and use of e-tender as a default procedure between countries that have e-procurement systems, compared to ones that do not. Good examples of e-procurement in the region are Ukraine and Georgia, as public procurement is completely electronic. Both countries have e-platforms that ensure high levels of transparency of procurement activities. Information on tenders, direct procurement contracts, procuring authorities and suppliers, bids, contract performance and payments are readily available on the e-platforms. Ukraine is even one step ahead in terms of transparency, as the procurement database is stored in open data format. An Application Programming Interface (API) is in place that makes it possible to connect with the public procurement database, export information and use it accordingly. Due to the API, Ukraine also has an analytical BI module of **Prozorro** - bi.prozorro.org, which serves as a practical tool to analyze procurement information graphically. Moldova is moving towards the same direction, as a new e-platform **M-tender** is supposed to be an analog of the Ukrainian Prozorro. Georgia also has plans to fully implement the Open Contracting Data Standard (OCDS) and cooperates with the World Bank to convert information to open data format.

The situation in the rest of the EaP countries is different and less optimistic. Azerbaijan still relies on traditional paper-based procurement methods. Although the idea of e-procurement has been discussed since early 2007, the government had not made significant advancements in this regard. The e-platform evolved over time to include basic information about the tenders and procurement plans, but even by conservative standards the platform does not contain key data, not to mention the lack of machine readability of the published data. Armenia officially has a mixed system, implying that it uses both electronic and paper-based procurement. The PPL ensures that the annual plans, notices of intended procurement, tender documentation and its amendments are made public. However, due to the information being both electronic and in certain cases on paper, aggregating information is difficult and the quality of this information is doubtful. For example, procurement information of 27 municipalities' subordinate bodies were not included in the report of the SNCO in 2015, as information could not be gathered efficiently. As for Belarus, it also has a mixed system. Although the PPL provides for the publication of all of the most important documents accompanying the bidding in electronic form, the process itself is not electronic. This is due to the fact that the preparation of tender documents, as well as the procedure for opening and reviewing tender proposals is conducted internally and by using paper medium.

A) Useful links regarding PP in EaP

Countries	Short description	Website
ARMENIA	Short presentation of Armenia	http://www.green-economies-eap.org/countries/armenia/
	Procurement System of the Republic of Armenia	https://gnumner.am/en/
	Procurement E-Directory of Armenia	https://www.tender.am/en/
	Armenian Competition Protection Commission	http://www.competition.am/index.php?menu=334&lng=2
	The Procuring Methods of Republic of Armenia	https://www.ilex.am/en/archive/292-the-procuring-methods-of-republic-of-armenia.html
	Policy Statement on Public-Private Partnerships of The Republic of Armenia	https://mineconomy.am/media/12961/PPP_Policy_Statement.pdf
AZERBAIJAN	Short presentation of Azerbaijan	http://www.green-economies-eap.org/countries/azerbaijan/
	Procurement E-Directory of Azerbaijan	https://etender.gov.az/
	State Procurement Agency	https://www.azerbaijans.com/content_538_en.html
BELARUS	Short presentation of Belarus	http://www.green-economies-eap.org/countries/belarus/
	E-procurement	https://www.butb.by/en/goszakupki-i-torgi-imushchestvom/goszakupki/
	Regulation and control of public procurement	https://www.mart.gov.by/en/sites/mart/home/activities/regulation-tenders.html
	Top Belarusian company in procurement - National Centre for Marketing	https://ncmps.by/en/services/procurement-services/
	A universal platform, where Belarusian and foreign companies may place their procurement information;	www.icetrade.by
	an electronic trade platform, where e-procurement is conducted on-line using the global electronic commerce tools;	www.goszakupki.by
	A Belorussian authentication centre, which issues EDS public-key certificates.	www.ca.ncmps.by
GEORGIA	Short presentation of Georgia	http://www.green-economies-eap.org/countries/georgia/
	Law Of Georgia On Public Procurement	https://matsne.gov.ge/en/document/download/31252/51/en/pdf
	State Procurement Agency	https://tenders.procurement.gov.ge/login.php?lang=en

6.3 Republic of Moldova

A) State of the Art

If public expenses for works, goods and services represent about 14% of EU GDP, which is about € 1.8 trillion per year. In the Republic of Moldova this indicator reaches about 5% of GDP, or almost 10 billion MD lei.

Moldova ratified the 2012 **WTO GPA** and became a Party to the 2012 WTO GPA on 14 July 2016. The GPA accession has been made possible by the adoption of a new law on public procurement No. 131 on 3 July 2015⁷⁶ which came into force on 1 May 2016.

This Law is largely compatible with the 2012 WTO GPA provisions, but amendments to the Law undertaken in the autumn of 2016 did not address all technical details necessary for a full compliance. The review of the Law as amended in 2016 revealed that a number of issues need to be addressed to ensure full compliance of the national public procurement legislation of Moldova with the 2012 WTO GPA standards.

The **DCFTA** is an arrangement between the EU and the Republic of Moldova that foresees a preferential trade relationship, based on mutually advantageous treatment, giving to each other better access to their markets than that offered to other trade partners. **Free Trade Agreement (FTA)** foresees a removal of import (and export, if applicable) duties on trade in goods between the parties. It further provides for removal of obstacles to trade in services and better access for companies to establish in respective markets. A specific policy dimension relates to the 'deep' aspect of this FTA with the Republic of Moldova. As a member of the Eastern Partnership, the Republic of Moldova has been offered an advanced, associated partner status with the EU, aimed to forge closer political and economic ties with the EU. On this basis, the DCFTA includes several provisions aiming at reforming of the Republic of Moldova's trade and trade-related policies, in line with, and on the basis of, the EU Acquis. These will provide for modernisation of the economy, anchoring of EU investment in the country, and better and more predictable policy environment.

The EU and the Republic of Moldova aim for further and gradual (within 8 years) modernisation of the Moldovan procurement system and alignment of the legislation with the EU one. Completion of the reform process, aiming to adapt Moldovan procurement practices to the EU ones, would result in better access to the EU market on the basis of national treatment, above certain value thresholds. Once the alignment of legislation is completed, the EU and the Republic of Moldova will look into the possibility of opening their respective markets to each other below the determined value thresholds.

The annexes in the chapters on public procurement in the DCFTA refer to outdated **EU public procurement legislation (Directives 2004/17 and 18)**. In 2014 the EU adopted a new legislative package on public procurement, which replaced these directives. The new procurement package aims to simplify the EU procurement regime, introduce more flexibility, establish better access to EU procurement markets for SMEs, and ensure that greater consideration is given to social and environmental criteria. Moreover, a specific Directive has been adopted on the award of concession contracts (**Directive 2014/23**). This legislative package was adopted in February 2014 and the member states had until April 2016 to transpose the new rules into their national law. In order to catch up with these new EU public procurement rules, the EU-Moldova Trade Committee adopted a decision to amend the relevant annexes. The new acts for approximation are **Directive 2014/23** on the award of concession contracts, **Directive 2014/24** on public procurement, as well as the **Directive 2014/25** on

⁷⁶ Official Journal of the Republic of Moldova 2015, №.197-205.

procurement by entities operating in the water, energy, transport and postal services sectors. Yet, these directives do not have to be implemented in their entirety or at once. As initially foreseen in these annexes, the EU legislation on public procurement is divided into “basic”, “mandatory” and “non-mandatory” elements (i.e. provisions that are not mandatory but recommended for approximation) and elements “that fall outside the scope of legislative approximation”. A time schedule links the gradual approximation to the applicable parts of this legislation with specific types of market access

Moreover, each phase shall be evaluated by the Trade Committee and the reciprocal granting of market access will only take place following positive assessment by this Committee, which will take into account the quality of legislation, as well as its practical implementation. The Trade Committee shall only proceed to the evaluation of the next phase once the measures to implement the previous phase have been carried out and approved. In the case of the Moldova AA a decision was taken to update the public procurement annex, also including an Indicative Time Schedule. Moldova has more time to implement the first 3 phases of the schedule (from 9 months to 6 years) compared to Ukraine. Moreover, in April 2018 the EU-Moldova Association Committee in Trade Configuration approved Decision 1/2018 which gave a favourable opinion regarding the National Strategy for Public Procurement for the period of 2016-2020, and the action plan for its implementation was adopted by the Moldova by Government Decision No 1332 of 14 December 2016. The EU has also updated the annex on public procurement in the Georgia AA, also on the basis of an Indicative Time Schedule similar to the one adopted with Ukraine and Moldova.

In application of the **Association Agreement**, Moldova adopted its first Strategy for the development of the public procurement system for 2016 – 2020. The public procurement law now provides a largely satisfactory, basic regulatory framework incorporating the fundamental EU principles governing the award of public contracts, but will require further amendments. State owned enterprises are not covered by the public procurement law, not even utilities. A separate law on procurement by utilities has been drafted and was adopted by Parliament on 21 May 2020 and published on 26 June 2020, but it entered into force 12 months after the date of publication

B) General characteristics of the Moldavian legislation on PP

In 2015, the Republic of Moldova, like other UN states members, undertook to implement the 2030 Agenda for Sustainable Development by adopting the Declaration during the Summit on the Sustainable Development, which took place in New York. As stated in introduction one of its objectives is the sustainable public procurement.

The implementation of sustainable public procurement in the Republic of Moldova began in 2017. The public procurement system of the Republic of Moldova is based largely on European good practices in the context of national legislation harmonization with the EU acquis, relevant Community legislation (**Directive 2004/18/EC** and **89/665/EEC** of the European Parliament and Council of the European Union) was rigorously implemented in the **Law No 131 of 07/03/2015**, and in the next years will be transposed the latest **European regulatory framework (Directives 24/2014 /EC and 25/20014/EC). Public Procurement Law No 131 of 03/07/2015** ⁷⁷is governing the possibility of using sustainable considerations in the selection and award criteria of the technical specifications, including clauses of contract performance.

Relevant resources:

- [Guide to sustainable public procurement](#)

⁷⁷ <https://tender.gov.md/ro/tip-de-pagin%C4%83-avansat%C4%83/achizi%C8%9Bii-durable>

- [Guide to sustainable public procurement eap to green project](#)

The public procurement system in the Republic of Moldova is regulated based on the **Law on public procurement no. 96-XVI of 13.04.2007**, as well as based on an impressive number of Regulations approved by the Government for the purpose of executing this law.

The needs of the state, but also of the administrative-territorial units in terms of goods, services and public works are permanent increase, both in terms of their quantity and quality, and their acquisition must be carried out in strict accordance with national legislation and the commitments assumed by the Republic of Moldova through the Association Agreement with the European Union .

The main task of public administration authorities in this area is to ensure the use of public funds based on the principles of **economy, efficiency and effectiveness** in order to achieve the objectives to obtain an optimal ratio between price and quality, as well as a management efficient use of public patrimony.

Ensuring a functional, efficient and transparent legal framework in the field of public procurement, including by harmonizing it with European Union Directives and international standards, are the basic principles that guide the actions of the Ministry of Finance (MoF) developing and implementing public procurement policies. The elaboration and promotion of the state policy in the field of public procurement is a basic function of the MoF.

In order to carry out the public procurement processes, a set of legislative and normative acts is used, the basic norm being **Law no. 131 of July 3, 2015** on public procurement.

In order to implement the provisions of the Moldova-EU Association Agreement, as well as to implement measures for the implementation of the Agreement on public procurement of the World Trade Organization, the Ministry of Finance has developed the **Strategy for the development of the public procurement system for 2016-2020** and The action plan regarding its implementation, approved by Government Decision no. 1332 of 14 December 2016.

At the same time, in order to implement the Law on Public Procurement, 5 draft Government Decisions were elaborated, three of which were finalized, according to the procedures specified by Law no. 317-XV of 18.07.2003 on the normative acts of the Government and other authorities of the central and local public administration, and are to be submitted to the Government for approval, and two other draft Decisions are at the stage of public consultation.

At the level of the **MoF**, the **Policy Service for the regulation of public procurement** is responsible for the elaboration and promotion of the legislative and normative framework.

The **Public Procurement Agency** is the specialized body subordinated to the MoF, which ensures the implementation of the state policy in the field of public procurement.

On November 30, 2016, a Memorandum was signed between the MoF, the Public Procurement Agency, the e-Government Center, several business associations, NGOs, but also companies in the IT sector, which will provide trading platforms for public procurement in electronic format. The project is a unique partnership that aims to develop e-Procurement in the Moldova as a tool for transparency of procurement procedures and, directly, for the management of public money.⁷⁸

⁷⁸ <https://mf.gov.md/en/content/public-procurement>

The main objective of the Memorandum is to implement and test a comprehensive system, in accordance with the principles of open source, open data and open contracting data as key concepts. The electronic system will function as a multi-platform for the public sector involving all stakeholders.

In this sense, the Order of the MoF no. 30 of February 10, 2017 “On the piloting of the electronic public procurement system for low value contracts”⁷⁹, according to which, the MoF and all subordinated administrative authorities, when conducting low value public procurement will use, in pilot mode, the electronic public procurement.

List of normative acts that regulate and implement Law on public procurement:

- a) [Government Decision no. 826 of 07.11.2012, for the approval of the Regulation on the framework agreement as a special way of award of the public procurement contract](#)
- b) [Government Decision no. 834 of 13.09.2010 for the approval of the Regulation on public procurement of works, Published: 17.09.2010 in the Official Gazette no. 169-171, art. no. 923;](#)
- c) [Government Decision no. 837 of 11.11.2011, for the approval of the Regulation on the Common Vocabulary of Public Procurement \(CPV\);](#)
- d) [Government Decision no. 9 of 17.01.2008, for the approval of the Regulation on the preparation and keeping of the public procurement file, Published: 25.01.2008 in the Official Gazette no. 16-17, art. 77;](#)
- e) [Government Decision no. 245 of 04.03.2008, for the approval of the Regulation on the acquisition of goods and services by requesting price offers, Published: 11.03.2008 in the Official Gazette no. 49-50, art. 314;](#)
- f) [Government Decision no. 148 of 14.02.2008, regarding the approval Small Procurement Regulations, Published: 22.02.2008 in the Official Gazette no. 37-39, art. 215;](#)
- g) [Government Decision no. 1407 of 10.12.2008, for approval Regulation on public procurement in one go source, Published: 19.12.2008 in the Official Gazette no. 226-229 art. 1425;](#)
- h) [Government Decision no. 352 of 05.05.2009, for the approval of the Regulation on the realization of public procurement of works design services, Published: 12.05.2009 in the Official Gazette no. 89-90 art. 403;](#)
- i) [Government Decision no. 1404 of 10.12.2008, for approval Regulation on how to calculate the estimated value of public procurement contracts and their planning, Published: 19.12.2008 in the Official Gazette no. 226-229 art. 1423;](#)
- j) [Government Decision no. 747 of 24.11.2009, for the approval of the Regulation on the organization and functioning, as well as of the limit staff of the Public Procurement Agency, Published: 27.11.2009 in the Official Gazette no. 171-172 art. 826;](#)
- k) [Government Decision no. 178 of 18.02.2008, for the approval of the Regulation on the manner of drawing up, updating and recording the List of qualified economic operators, Published: 26.02.2008 in the Official Gazette no. 40-41, art. 244;](#)
- l) [Government Decision no. 355 of 08.05.2009 regarding the approval of the Technical Concept of the Automated Information System “State Register of Public Procurement”, Published: 15.05.2009 in the Official Gazette no. 92-93 art. 407;](#)
- m) [Regulation on public works procurement, approved by GD no. 834 of September 13, 2010, Published: September 17, 2010 in the Monitor Official no. 169-171 art. 923.](#)

⁷⁹ <https://mf.gov.md/ro/managementul-finan%C8%9Belor-publice/achizi%C8%9Bii-publice>

C) Public procurement in the targeted sectors

On 21 May 2020, the Parliament of the Republic of Moldova approved in final reading the **Law on procurement in the energy, water, transport and postal services sectors** [P74/2020](#), which partially is transposing into national legislation Directive 2014/25 / EU of the European Parliament and of the Council of 26 February 2014. Thus, for the purposes of this law, a sectoral procurement is the acquisition, through a contract of goods, works or services in the above-mentioned sectors, by one or more contracting entities from economic operators chosen by those contracting entities.

The law aims to establish the particularities regarding the procurement procedures carried out by the specific sectoral entities. The law will apply to several activities in the water sector, such as the provision or operation of networks intended to provide a public service in connection with the production, transport or distribution of drinking water, but also the supply of those networks with drinking water. Thus, the Law on sectoral procurement applies to procurement contracts whose estimated value, excluding VAT, is equal to or higher than the following thresholds:

- a) for goods and services contracts, as well as for solution tenders - up to 800 000 lei (up to 40 000€);
- b) for works contracts - 2 000 000 lei (100 000€)
- c) for procurement contracts having as object social services and other specific services listed in annex no. 1 000 000 - 2 000 000 lei (50 000 - 100 00€).

Procurement contracts whose estimated value, excluding VAT, does not exceed the mentioned thresholds are to be regulated by the Government, by normative acts secondary to the law in question. The main purpose of this law is to regulate the procedures for awarding procurement contracts in those sectors in a transparent, non-discriminatory, competitive and open manner and align the national regulatory framework with the European Union Acquis, by transposing the basic elements of European Union Directive no. 2014/25 / EU of 26 February 2014. The law regulates procurement procedures for public and private companies in the nominated sectors.

The regulation includes:

- the way of ensuring the transparency of procurements, by publishing in the Public Procurement Bulletin both the notices of intent and the notices of participation, as well as the notices of award;
- the way of establishing the fair evaluation criteria, as in the case of public procurement procedures regulated by Law no. 131/2015, the award criteria may be:
 - a) the lowest price;
 - b) the lowest cost;
 - c) the best quality-price ratio;
 - d) the best quality-cost ratio.
- the way of reporting and information, as well as being similar to public procurement procedures.

The provisions of the Law promote, first of all, the interests of the state regarding the establishment of a transparent and efficient mechanism for the procurement of goods, works and services by the entities active in the fields of energy, water, transport and postal services. Also, the Law promotes, last but not least, the interests of the population of Moldova - final consumers who benefit from the services of the entities mentioned above, through the premium paid as prices and tariffs of those services. At the same time, the Law addresses the interests of the contracting parties which, in addition to the detailed mechanism for organizing and conducting sectoral procurement procedures, will also benefit from increased transparency of award procedures, including ensuring equal, impartial and non-discriminatory treatment by contracting entities.

Moreover, according to the Law, the interested parties will also benefit from an efficient mechanism for resolving appeals regarding the decisions of the contracting entities, or, according to Chapter XIII “Dispute Resolution and Legal Liability”, the settlement of appeals regarding the award of sectoral contracts is to the National Agency for Solving Appeals, according to Chapter X of Law no. 131/2015 on public procurement.

The following scheme summarizes the sources of funding of water and wastewater services:

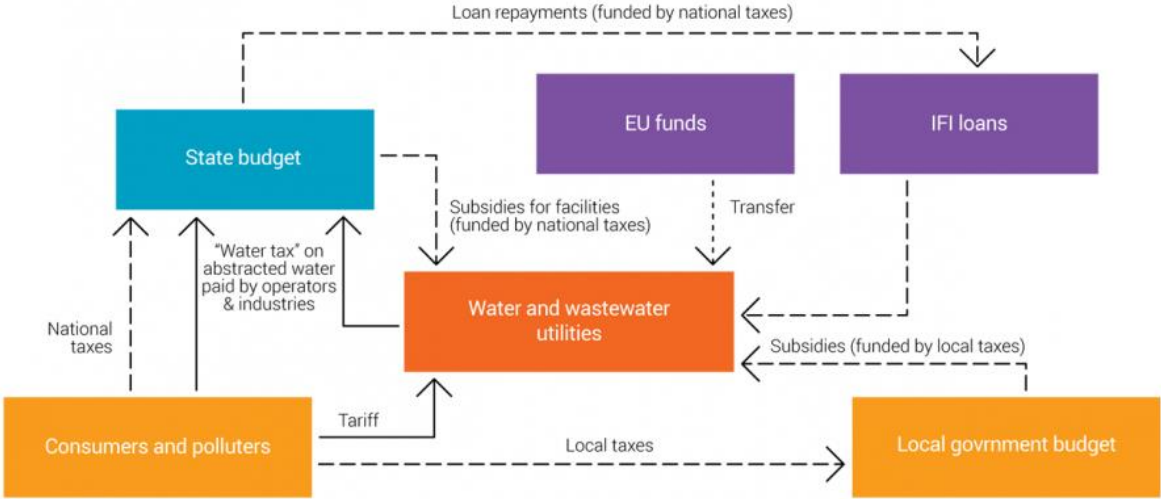


Image 12 - main sources of funding

D) Main procurers/buyers

In Moldova, the main procurers are represented by state authorities (local and central public authorities), which often are supported by international donors like the European Union, German Agency for International Cooperation GIZ, World bank, EBRD to implement projects related to water management for example.

Institution	Competencies
The Ministry of Finance (MoF)	develop and promote policies in PP area
The Public Procurement Agency (PPA)	subordinated to the MoF, responsible for: <ul style="list-style-type: none"> (i) developing and submitting to the MoF proposals to amend and complete the public procurement legal framework; (ii) establishing, updating and maintaining the List of Debarred firms; (iii) monitoring the compliance of public procurement tenders with the national legislation and analysing the performance of the public procurement system; (iv) offering consulting and advisory services, as well as organizing various workshops on public procurement procedures; (v) developing and implementing mechanisms for certifying the specialists within contracting authorities responsible for conducting public procurement tenders; (vi) editing the Public Procurement Bulletin; (vii) maintaining the official website for public procurement; (viii) conducting quarterly and annual statistical analyses of public procurement; (ix) requesting from competent bodies any information required to perform its functions; (x) conducting communication campaigns on public procurement; (xi) issuing annual progress reports on public procurement system performance; and (xii) collaborating with international institutions and similar agencies in the area of public procurement. Among the challenges facing the MoF and the PPA are the need to sort out any perceived discrepancies in their respective roles and responsibilities and, more importantly, to ensure that adequate staff and other resources are available and that they are properly allocated to the priority tasks at hand.
National Agency for the Resolution of Complaints (ANSC)	examines complaints arising from public procurement tenders and issues corresponding decisions
The State Treasury	within the MoF responsible for development and implementation of the state policy in the field of management and transparency of public finances, including registration of public procurement contracts for payment purposes
Financial Inspection	is an institution subordinated to the MoF which performs the centralized financial control on compliance with the legislation of operations and transactions related to the management of national public budget resources and public patrimony.
Court of Accounts	supreme Audit Institution which is responsible for financial and performance audits in Moldova's public sector.
The National Anticorruption Centre (CNA)	national institution specialized in preventing and combating corruption
The National Integrity Authority (ANI)	public authority that ensures integrity in the exercise of public office or public dignity and the prevention of corruption this applies to entities financed from the State budget and to local authorities, with the exception of SOEs and some autonomous public bodies, e.g. hospitals, which instead use commercial banks for handling payments to contractors Moldova: MAPS Assessment of the Public Procurement System
Competition Council (CC)	public authority that ensures the observance of the legislation in the field of competition authorities
The Centre for Centralized Public Procurement in Health (CAPCS)	centralised procurement authority in charge tenders planning and conducting, award contracts and monitor contract execution for the supply of medicines, equipment and other medical products for health institutions.

There are no other centralised purchasing bodies. Both agencies mentioned, in particular the CAPCS, have faced challenges through their partial reliance on outdated regulations and the lack of adequate tools for using modern procurement approaches, including for demand analysis and aggregation and for running framework agreements.

In Moldova there are about 3,000 contracting authorities, many of them quite small. There is no official list of them and their exact number is not known. They perform their public procurement duties not through a dedicated administrative (sub-)unit but through a working group established for this purpose and formed of public servants and experts with professional experience in the field of public procurement from within the contracting authority. These staff members thus have procurement as a secondary task, in addition to the normal duties of their regular, official position.

E) Tendering practices / MTender e-platform

Since 2012, businesses have access to an electronic procurement system. Virtually all procurements are conducted online through the [MTender](#) platform developed with the support of EBRD and local IT companies.

The e-platform for public procurement makes it easier for anyone interested to have access to public procurement notices and tender documentation. First tested for small procurements, the platform was extended to encompass the entire range of procurements organized by public authorities.

Economic operators may associate for the purpose of submitting tenders and/or appear as associate tenderers.

The association shall be bound to obtain a certain form of legal status when such transformation is necessary for the proper performance of the contract but only after its award.

F) EU and non-EU participation in Moldovan PP

The Public Procurement Law ensures, in principle, the equitable right of all economic operators to participate or not to participate in the framework of a public procurement procedure. The law does not limit the right of the resident or non-resident economic operator, natural or legal person of public or private law or association of such persons to participate in public procurement procedures.

On the other hand, in practice, because of the particularities of the applicable legislation, non-resident economic operators cannot submit tenders within the public procurement procedures if they do not have legal representatives on the territory of the Republic of Moldova.

These issues arise from the provisions of the PPL, Art. 33, para. 14 i), which mentions the obligation to apply an electronic signature on electronic offers, but also from the provisions of Law no. 91/2014 on electronic signature and electronic documents, according to which the electronic signature issued by authorities from other states than Moldova is not recognized, as there are currently no agreements in this regard between Moldova and other states (Art. 6). At the same time, the issuance of the electronic signature is conditioned by the identification of the holder (name, surname, identification number of the natural person), which implies the presentation of the identity card of Moldova, residence permit, or other document containing a personal identification code (IDNP). The only solution at the moment is the **delegation by proxy of the right to electronically sign the offers to persons resident in Moldova, holders of qualified electronic signatures**. However, available data is not sufficient to determine to what extent this restriction affects public procurement.

The contracting authority has the obligation to establish the selection criteria for each procedure. The PPL contains detailed provisions for determining appropriate selection criteria of the tenderer or candidate in terms of grounds for exclusion (eligibility) and, as applicable, right to exercise an economic activity, economic and financial capacity, technical and professional capacity, quality assurance, and environmental protection requirements.

There are no specific rules aimed at creating a level playing field for the participation of state owned enterprises in public procurement. On the other hand, Art. 6 of the Public Procurement Law establishes a special regime for protected workshops and social insertion companies if the majority of the employees involved are people with disabilities who, due to the nature or the severity of their condition, cannot carry out a professional activity under the same conditions as those of other tenderers capable of normal participation in the procedures for awarding public procurement contracts.

In order to determine the tenderer's eligibility, the contracting authority requests the completion and submission of the European Single Procurement Document (ESPD), which consists of an updated declaration of conformity with the eligibility requirements, as a preliminary proof, instead of the individual certificates issued by the public authorities or by third parties which confirm that the economic operator concerned fulfils the conditions stipulated by the contracting authority.

The PPL also sets out other possible means for demonstrating conformity with the selection criteria, and the contracting authority has the obligation to indicate for each procedure the supporting documents required for this purpose, as further provided by the legislation in force. However, the provisions in the EU Directives regarding lists of qualified economic operators are no longer reflected in the PPL. The effect is that neither tenderers nor contracting authorities can benefit from the potential advantages offered by these provisions. At the same time, it should be noted that the creation and use of such lists remains optional. The article of the PPL providing for the use of lists of qualified economic operators was thus deleted with effect from 1 October 2018, without replacement. Nevertheless, Government decree 1420/2016 with approval of the Regulation of the List of qualified economic operators, based on the earlier wording of the PPL in this respect, has not been repealed. In addition, Government decree 134/2017 with approval of the Regulation on the organisation and functioning of the PPA and its staff still contains an obligation for the PPA to draw up, update and maintain the list of qualified economic operators. The list established by the PPA in line with earlier versions of the PPL has not been complemented since August 2018. The earliest entries are from March 2008 and do not appear to have been updated. Nevertheless, the list is still published on the PPA website, creating additional confusion for contracting authorities and economic operators alike. Also, the way the current e-procurement system is designed means that, in practice, only the qualifications of the winning tenderer are checked, and this only after an electronic auction has been held.

Contrary to what the PPL requires, there is thus no possibility to exclude unqualified participants from the evaluation of their tenders and from participating in the electronic auction. The manner of drawing up, publishing and modifying the tender documents documentation is provided in the PPL, Art. 40 and 41. The rules regarding the description of goods, works and services in the tender documents are provided in Art. 37, requiring them to be clear, relevant and sufficient for the preparation of responsive tenders. In the description of the goods, services and works, the contracting authority must indicate the national or international standards to be used, **without favouring a certain producer or supplier or contractor or service provider**. The PPL contains detailed regulations to be followed by the tenderers and the contracting authorities for the clarification of tender documents.

(1) In the award documentation, **the contracting authority may ask the tenderer to indicate in its tender any part of the contract it may intend to subcontract to third parties and any proposed subcontractors.**

(2) In the case of works contracts and in respect of services to be provided at a facility under the direct oversight of the contracting authority, after the award of the contract and at the latest when the performance of the contract commences, **the contracting authority shall require the tenderer to indicate to the contracting authority the name, contact details and legal representatives of its subcontractors,** involved in such works or services, in so far as known at this point in time.

(3) **The tenderer shall notify the contracting authority** of any changes to the information referred to in para 2 during the course of the contract and the tenderer shall be obliged to provide information for any new subcontractors which it subsequently involves in such works or services

(11) **Where a subcontractor expresses the option of being paid directly,** the contracting authority shall have the obligation to establish in the public procurement contract binding contractual clauses requiring the transfer of the payment obligations to the subcontractor/s for the part/s of the contract

6.4 Ukraine

A) General characteristics of the Ukrainian Legislation on PP

a) *International obligations*

In general, to date, Ukraine has the following **international obligations** in the field of public procurement in accordance with the following documents (in chronological order):

- **FTA with the EFTA⁸⁰** states (EFTA 2010), which became effective on June 1, 2012 (On the Ratification of the Free Trade Agreement between the EFTA states and Ukraine, the Agreement on Agriculture between the Kingdom of Norway and Ukraine, the Agreement on Agriculture between Iceland and Ukraine and the Agreement on Agriculture between Swiss Confederation and Ukraine, Law of Ukraine, No.4091-VI, 2011, art. 1), containing general provisions on trade in goods (industrial, agricultural, fish and marine products), services and dispute settlement;
- **AA** between the European Union, the European Atomic Energy Community and their Member States on the One Part, and Ukraine, on the Other Part of 2014. (Chapter 8 of Section IV (Art. 148-156 and Annex XXI; according to Annex XXI-A, the Indicative Diagram of Institutional reforms, adaptation of legislation and market access, which is divided into several stages, is established) (VRU, 2014);
On September 1, 2017, the AA between Ukraine and the EU entered into force in full scope after a long ratification process by all Member States.
- The **DCFTA⁸¹** is an important part of the AA between Ukraine and the EU, one of EU's the most ambitious bilateral agreements. DCFTA provides for significant liberalization of the bilateral trade, elimination of tariffs and quotas, and harmonization of legislative and regulatory framework.

⁸⁰ <https://www.efta.int/free-trade/free-trade-agreements/ukraine#anchor-10>

⁸¹ <https://ukraine-eu.mfa.gov.ua/en/2633-relations/ugoda-pro-asociaciyu-mizh-ukrayinoyu-ta-yes>

- It also refers to the introduction of EU rules in the field of public procurement by Ukraine, which will allow gradual opening the EU public procurement market for Ukrainian business.
- Ukraine became a party to the **WTO GPA** in 2016.

b) Ukrainian legislation

The basis of the **Ukrainian legislation in public procurement** is made up of the following laws and regulations:⁸²

a) On **Public Procurement, Law of Ukraine, of Dec. 25, 2015, No.922-VIII**, which encapsulated the legal and economic principles of purchase of goods, works and services to meet the requirements of the state and the local community, as well as the procedure for their implementation (Art. 1), which came into force for all customers in Aug. 1, 2016 (regulatory acts in the similar sense exist in almost all countries of the world);

b) On Sanctions, **Law of Ukraine, of Aug. 14, 2014, No.1644-VII**, prohibiting government procurement of goods, works and services from the state-owned legal entities being the residents of a foreign country and legal persons, a share of the registered capital of which is the property of a foreign country, as well as government procurement from other entities engaged in the sale of goods, works, services originating from a foreign country to which sanctions have been applied (Art. 4);

c) On **Prevention of Corruption, Law of Ukraine, of Oct. 14, 2014, No.1700-VII**, stating that the anti-corruption program must be approved by the heads of the legal entities, being the participants of the preliminary qualification and procurement procedures in accordance with the Law of Ukraine On Government Procurement, if the value of purchase of goods, service (services), and work equals or exceeds 20 mln hryvnias (Art. 62);

d) On Peculiarities of Procurement of Goods, Works and Services for Ensuring Defence Needs, **Law of Ukraine, of May 12, 2016 No.1356-VIII**, specifies the implementation procedures for the procurement of goods, works and services to ensure meeting of defence needs for the special period, the period of the anti-terrorist operation, during the period of the state of emergency (Art. 1);

e) On Approval of the **Procedure for the Electronic Procurement System Operation and the Authorisation of Electronic Platforms**, Resolution of the Cabinet of Ministers of Ukraine, of Feb. 24, 2016, No.166 - concerning the operation of the e-procurement system, the procedure of authorisation of electronic platforms, conditions and cases of disconnection of electronic platforms from the e-procurement system, the requirements to electronic platforms and the responsibility of the operators of authorised electronic platforms;

f) On **the Strategy of Reforming Public Procurement System (the "Roadmap" - according to Article 152:2 of the Association Agreement)**, **Resolution of the Cabinet of Ministers of Ukraine**, of Feb. 24, 2016, No. 175-p, specified the fundamentals of harmonisation of national legislation to the EU rules, the adaptation of key concepts, notions and bringing the procurement procedures in compliance with international standards. Moreover, Resolutions of the Cabinet of Ministers of Ukraine: On the Prepayment of Goods, Works and Services Purchased for Budget Funds of Apr. 23, 2014, No.117, is of great importance; On Complaint Filing Fees Setting of Mar. 23, 2016, No.291; On Approval of the

⁸² Holubieva, V., Pyvovar, Y., Andrushchenko, I., & Honchar, A. (2021). Public procurement in Ukraine in the context of international requirements: The way to improve a legal regulation. *Revista de La Universidad Del Zulia*, 12(34), 106–132. <https://doi.org/10.46925//rdluz.34.08>

Procedure of Using Funds Provided by the State Budget for Financial Support to Ensure the Functioning of the Government Procurement Web-Portal of July 22, 2016, No.467;

g) Orders of the Ministry of Economic Development and Trade of 2016: On the **Procedure of Publication of Information on Public Procurement** of Mar. 18, 2016, No.477; On Allocating the Web Portal of the Authorised Body for Procurement as Part of the Electronic Procurement System and Ensuring of Its Functioning (ProZorro) of Mar. 18, 2016, No.473; On Approval of the Forms of Documents in Public Procurement of Mar. 22, 2016, No.490; On Approval of Samples of Tender Documents of Apr. 13, 2016, No.680; On Approval of the Procedure for Determining the Procurement Item of Mar. 17, 2016, No.454; On Approval of a Sample Provision on the Tender Committee or Authorised Person (Persons) of Mar. 30, 2016, No.557; On Approval of the Instruction Concerning the Procedure for Using the Electronic Procurement System in Case of Procurement, the Cost of Which is Less than the Cost specified in Paragraphs 2 and 3 of Part 1 of Article 2 of the Law of Ukraine "On Public Procurement", Order of the Prozorro State Enterprise, of Mar. 19, 2019, No.10 and others.

c) Links to Laws of Ukraine in the field of procurement:⁸³

- a) Law of Ukraine "On Public Procurement"
- b) Law of Ukraine " On peculiarities of making procurement of goods, works and services for guaranteed ensuring of the defense needs"

Auxiliary laws:⁸⁴

- a) Law of Ukraine "On electronic documents and electronic document circulation"
- b) The Law of Ukraine "About the electronic digital signature"
- c) Law of Ukraine "On access to public information"
- d) Law of Ukraine "On Antimonopoly Committee of Ukraine"
- e) Law of Ukraine "On Prevention of Corruption"

B) Green public procurement, sustainability aspects

If Public procurement in the EU amounts to around 14% of GDP (€2 trillion per year). In Ukraine, this figure amounts to around 13% of GDP. Thus, public procurement can play an important role in meeting environmental goals.

Public procurement is considered also an integral part of The European Green Deal, according to which Europe must become carbon neutral by 2050.

The Law of Ukraine "On Public Procurement" of April 19, 2020, offers new opportunities for developing green procurement. On April 19, 2020, the new version of the law of Ukraine "On Public Procurement" was enacted. The legal framework for relations in public procurement underwent significant changes, mainly due to Ukraine fulfilling its commitments under the Association Agreement.

a) Procurement procedures

Generally, open tender is the standard procedure in Ukraine.

- Open tender exists in two versions, regular and European.
 - Regular open tender has the following stages:

⁸³ www.e-tender.ua

⁸⁴ idem

- Introducing tender to annual procurement plan.
 - Publication of the announcement (call for competition) and tender documentation.
 - Tender proposals submission.
 - Electronic auction.
 - Prequalification.
 - Award of the contract.
 - European open tender reverses some of the stages:
 - Introducing tender to annual procurement plan.
 - Publication of the bilingual (UA/EN) announcement (call for competition) and tender documentation.
 - Tender proposals submission.
 - Prequalification.
 - Electronic auction.
 - Award of the contract.
- Restricted tender is used if it is necessary to conduct preliminary qualification of bidders:
 - Stage No. 1 Qualification selection (at least 4 bidders required)
 - Publication of the announcement with terms and conditions of the tender. The contracting authority may invite selected candidates; however, any interested parties may submit their bids without invitation.
 - All candidates submit documents or information to confirm compliance with the selection criteria and absence of ground for exclusion from the tender according to the PPL. No pricing bids are submitted at this stage.
 - Selection of the bidders.
 - Stage No. 2 Open tender with the selected bidders (at least 3 bidders)
- Negotiated procedure is used only in the following exceptional cases:
 - if an open tender procedure has been cancelled twice due to insufficient bids;
 - if works, goods, or services can be performed, supplied, or provided exclusively by a particular company (lack of competition for technical reasons; subject of tender is a piece of art or is heavily protected by IP rights; conclusion of a contract with a supplier of "last resort" for the supply of electricity or natural gas);
 - if it is necessary to purchase goods/services urgently in connection with exceptional circumstances
 - it is necessary to supply an additional volume of goods from the same supplier if, in the case of a change of supplier, the contracting authority would be forced to purchase goods with other technical characteristics, which would lead to incompatibilities associated with operation and maintenance;
 - if after conclusion of the procurement contract, the contracting authority needs to purchase additional similar works or services from the same participant;
 - purchase of goods under the procedure of restoring solvency of a debtor;
 - procurement of legal services related to protecting rights and interests of the state of Ukraine (including international arbitration).
 - The contracting authority must publish substantial explanation for their use of the negotiated procedure. Any candidate may appeal the decision to use the negotiated procedure to the Antimonopoly Committee of Ukraine. To be invited to negotiations, a participant should contact a contracting authority directly within the terms specified in the announcement of the procurement.

- Competitive dialogue is used if a contracting authority is uncertain about necessary technical, qualitative characteristics (specifications) of works or a kind of services to be procured.
 - Stage No. 1 Specification of the tender documentation:
 - Submission of tender proposals with information regarding compliance with selection criteria and description of the procurement procedure, but without pricing bids.
 - Negotiation with the selected bidders (at least 3).
 - Finalization of the tender documentation based on the results of negotiations.
 - Stage No. 2 Open tender with the selected bidders.

85

Up to UAH 50,000 (ca EUR 1,500)	Prozorro is recommended but not required
From UAH 50,000 to UAH 200,000 (ca EUR 6,000)	Simplified tender* (procurement of goods or services)
From UAH 50,000 to UAH 1,5 mln (ca EUR 45,000)	Simplified tender (procurement of works)
From UAH 200,000/UAH 1,5 mln to EUR 133,000/EUR 5,150 (for works)	Regular open tenders
From UAH 200,000/UAH 1,5 mln (for works)	Restricted tender, competitive dialogue, negotiated procedure
From EUR 133,000 (or from EUR 5,150 for works)	<ul style="list-style-type: none"> - Announcement of the tender (EU open tender, competitive dialogue, restricted tender) is in Ukrainian and English - European open tender, restricted tender, competitive dialogue

Image 13 - Thresholds prescribed by the Ukrainian Public Procurement Law

A detailed guide about each procedure is presented in the publication public procurement in Ukraine using the Prozorro system.⁸⁶

b) Prozorro system

The “*Law of Ukraine on public procurement*” requests that all public bodies use an **e-procurement** on-line system via a dedicated web portal called “**Prozorro**”. The use of the system is governed by Decree of the Ministry of Economic Development, Trade and Agriculture of Ukraine No. 648 of 07.04.2020 " on the Authorised Body Web Portal on Procurement".

Public tenders in Ukraine are open to a broad range of economic operators, including private individuals, sole traders and registered companies – domestic or foreign without limitations. **From April 2020 groupings (consortia) of companies also have the possibility to participate in tenders.**

In terms of the bodies which are obliged to publish their tenders and apply the PPL, they include public authorities, local self-government bodies, social security bodies and other entities (health care facilities, educational, scientific and cultural institutions etc.); utilities (e.g. in the energy, transport and

⁸⁵ <https://cms.law/en/int/expert-guides/cms-expert-guide-to-public-procurement/ukraine>

⁸⁶ http://publications.gc.ca/collections/collection_2020/amc-gac/FR5-170-2019-eng.pdf

telecommunications sectors) and State-owned or controlled enterprises. The eProcurement system Prozorro has simplified access for economic operators to public contracts, making it easier to participate and compete.⁸⁷

All information in Prozorro is available in Ukrainian. However, **announcements for tenders with a value equal to or exceeding €133,000 are published in Ukrainian and English.**

Tender notices can be searched by keyword, by CPV code, by the name of the procuring entity or some other search criteria. Operators can register to bid via e-platforms linked to (accredited by) ProZorro. A small fee is payable for the submission of bids. Different rules and timelines for the submission of bids apply, depending on whether the contract is below or above threshold and on which procedure is used.

The majority of contracts are awarded through the open tender procedure, meaning any operator may submit a bid. The contracting authority may apply one or several qualification criteria relating to bidders' equipment and resources, staff and previous experience.

The web-portal also allows access to all documents submitted by bidders as well as the eventually concluded contract and any amendments to the contract. It is also possible to find all payments/transactions between procuring entities and contractors by using the free service known as "007" (<http://www.007.org.ua/>).⁸⁸

Some useful links for the system are:

- Access to the web portal: <http://www.prozorro.gov.ua>
- Access to the ProZorro market: <https://prozorro.gov.ua/ProzorroMarket>
- FAQ section : <https://prozorro.gov.ua/faq>
- Where to start from: <http://infobox.prozorro.org/knowledge-base/view/668?q=>

To participate in procurements, bidders must use authorized electronic trading platforms. Regardless of the platform used, the tender data will be identical (even though the visual representation may vary).

If the state owns a central database, the business takes care of the interface and user support. Authorized electronic platforms compete with each other and thus try to attract as many suppliers as possible to participate in the bidding. There are now 13 of them: [link](#) to the webpage.

C) Tenders

Authorization procedures for foreign bidders vary on different platforms. Foreign companies may choose from the following procedures available on:

- Zakupki.prom.ua
- SmartTender.biz
- Opentenders.Online
- E-tender
- Izi Trade
- Newtrend
- Uub

⁸⁷ <https://infobox.prozorro.org/upload/files/main/1398/547/gpa-guide-ukraine-fin-update2020-2.pdf>

⁸⁸ idem

- [Tender Online](#)

D) Main buyers and procurers

a) Purchasers

Contracting authorities (or Procuring Entities) in Ukraine are called “Zamovnyk” and all procurements of contracting authorities are regulated by the PPL.

Contracting authorities may be generally sub-divided into 3 groups:

1) **Traditional budget-funded contracting authorities** directly financed from State or local budgets – including public authorities, local self-government bodies, social security bodies and other entities (health care facilities, educational, scientific and cultural institutions etc.) financed from the State Budget or local budgets;

2) **Utilities** – these are mostly State-owned enterprises or municipal companies enjoying a monopoly in the areas of public interest explicitly listed in the PPL (i.e. power and/or heat supply, airports and sea ports, rail transport, urban electric transport etc.);

3) **Enterprises** – which include State-owned or communal enterprises and their associations providing for the needs of the State or a territorial community, if such activities are not carried out on an industrial or commercial basis, and if they have any of the following characteristics:

- enterprises that are recipients of public funds;
- public authorities or local self-governing bodies, or other contracting authorities have the majority of votes in the supreme governing body of the legal entity;
- more than 50% of shares (interests, participatory interests) in the legal entity’s authorized capital belongs to the State or a local community.

Central procurement bodies (CPBs) are very new actors conducting procurement procedures on behalf of contracting authorities in Ukraine. Currently (and of 2020) there are two CPB acting at central level (CPB “Professional Procurements”) and specific CPB in the health care sector “Medical Procurements of Ukraine” as well as a several new CPBs were established in 2020 at regional level.

b) Bidders

A potential seller (contractor) to the public sector under the PPL is called a “Tenderer” (“Uchasnyk”). This includes a natural person, including a sole trader, or a legal entity (whether resident or non-resident) that submits a tender or takes part in the negotiations, if a negotiated procedure is applied.

In Ukraine, almost any economic operator - whether a natural person or a legal entity - may participate in a procurement procedure. It is important to note that, a natural person does not necessarily have to be a registered as private entrepreneur, which means that it may be any natural person (a citizen of Ukraine or a foreigner). Meanwhile, for legal entities, it should be specified that subsidiaries and/or branches without the status of a legal entity may not participate in procurement procedures on their own behalf, but only through their parent companies. Finally, from April 2020 temporary associations/groupings of companies also have a possibility to participate in tenders.

NB! Local content, specific exclusions and sanctions. There are no local preference provisions in the public procurement legislation in Ukraine. Moreover Art.5 of the PPL strictly forbids discrimination on

national or related grounds, stating that “Domestic and foreign tenderers, regardless of their form of ownership and business legal structure, shall participate in procurement procedures on equal terms”.

c) What is purchased

The object of a procurement in the wording of the PPL is called the “procurement item” - supplies, works or services purchased by the contracting authority within a single procurement procedure, in respect of which tenderers are permitted to submit tenders or proposals for negotiation (in cases where a negotiated procedure applies).

The meanings of the categories of goods, services and works are set out in Article 1 of the PPL. The main thing to note is that the definition of “works”, unlike “goods” and “services” is limited to certain activities. The distinction between goods/services procurement items and those concerning works is very important because these two groups have different value thresholds as criteria determining whether the PPL applies.

There are also different rules for these groups regarding the determination of the procurement item.

1. The minimum value threshold to apply one of four procurement procedures is 200,000 UAH for goods/services and 1.5 million UAH for works.
2. For contracting authorities in the utilities sectors (e.g. energy production and supply, water, transport, postal services and telecommunications), the relevant value thresholds to apply one of four procurement procedures are:
 - For goods/services - 1 million UAH,
 - For works - 5 million UAH.
3. If the contract value exceeds the EU thresholds for goods/services (133 000 €) or for works (5,150,000 €) all tender notices must be published on PROZORRO in English.

Finally, from April 2020 if the value of the procurement item equals or exceeds 50,000 UAH but is lower than the thresholds indicated above, the contracting authority is obliged to conduct a simplified eAuction through Prozorro or conclude a direct contract with a supplier selected at its own discretion in limited cases listed in the PPL. Even in the latter cases (direct award), it is mandatory for the contracting authority to publish a report about the concluded contract on the Prozorro website.

According to the PPL, each procurement item must be defined on the basis of EU Common Procurement Vocabulary (CPV) codes⁴. In the case of works, in addition to CPV the relevant State construction standards are also applied to identify works procurement item (ДСТУ Б.Д.1.1-1:2013 approved by Order of Ministry of Regional Development and Construction No. 293 of 5 July 2013).

NB: The web-portal prozorro.gov.ua has a search service based on key words, CPVcodes, dates of publication, names of contracting authorities, regions and types of procedure.

Procurement of international donors and public procurement of other countries in Prozorro can be followed through this link: <https://prozorro.gov.ua/news/?group=zakupivli-mizhnarodnih-donoriv>

7. Strategic partners, network development

7.1 Definitions

A) Clusters and Business Support Organisations

The **Enterprise Europe Network (EEN)** helps companies to innovate and grow internationally. Being the world's largest support network for SMEs with international ambitions, EEN brings together 3,000 experts from more than 600 member organisations that are all renowned for their excellence in business support. Member organisations include technology poles, innovation support organisations, universities and research institutes, regional development organisations, chambers of commerce and industry; from European and non-European countries.

The EEN added values are composed of the following:



In order to search for EEN members, the website proposes a search tool to support networking in designated geographical areas via [this link](#).

The concept of networks of organisations and individuals that together constitute a system of mutual support and cooperation was introduced in the 1990s by James Moore⁸⁹.

According to the European Cluster Collaboration Platform, clusters are “*regional ecosystems of specific industries related by knowledge, skills, inputs, demands and/or other linkages*”⁹⁰. Furthermore, they “*should be considered as regional ecosystems of related industries and competences featuring a broad array of inter-industry interdependencies*”⁹¹.

Cluster organisations are the legal entities in charge of supporting the collaboration and networking among clusters. Their role is also to act as innovation support providers by providing business support services, especially to SMEs. Usually, they are the privileged actors that facilitate strategic partnership across clusters and other business support organisations⁹².

Business support organisations (BSOs) act as intermediaries between SMEs and government institutions. The latter often have difficulty identifying the obstacles SMEs are facing across sectors

⁸⁹ Moore, James F. (1996). *The Death of Competition: Leadership & Strategy in the Age of Business Ecosystems*. New York: HarperBusiness

⁹⁰ <https://www.nber.org/papers/w20375>

⁹¹ <https://clustercollaboration.eu/cluster-definitions>

⁹² Ibid

and regions. This leads to targeted policy making taking into account these issues in order to strengthen SMEs competitiveness and introduce new opportunities prospects⁹³.

The European Cluster Collaboration Platform (ECCP) centralizes all clusters and BSOs in Europe into one collaboration platform in order to facilitate partnership opportunities amongst clusters/BSOs. P2GreenEST partnership is active on the website, and a dedicated project page has been created in order to publish news, milestones or events throughout the project duration⁹⁴.

In order to find more clusters in Europe and in Associated Countries, ECCP provides a tool to find partners via [this link](#)

At national scale, cluster/BSOs groups exist. Their role is to create a network of clusters/BSOs in a specific territory in order to strengthen ecosystems structuration, support innovation and development of clusters/BSOs, participate in diffusing cross-business cooperation culture and help clusters/BSOs as actors of transition⁹⁵.

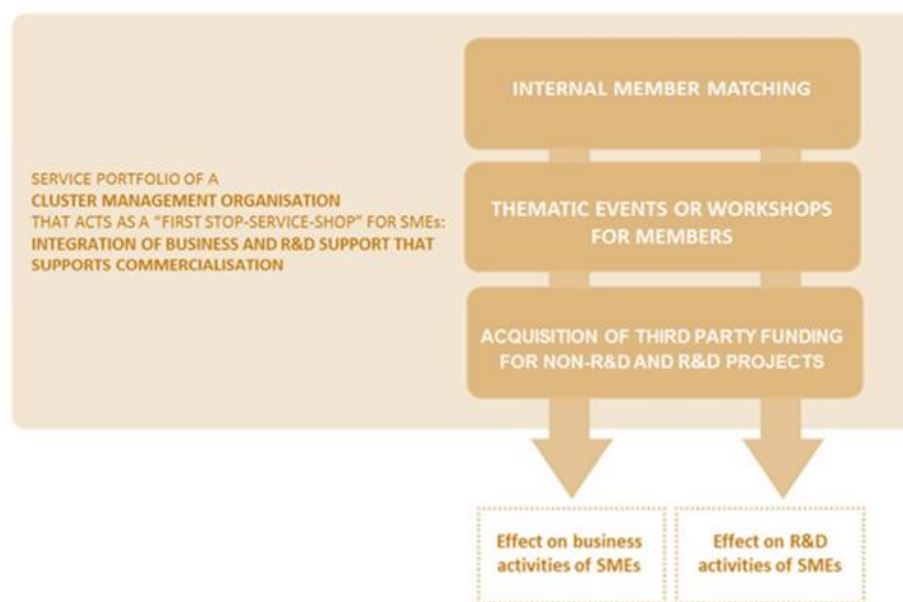


Chart 1 - Impact of clusters/BSOs ⁹⁶

7.2 Partners at EaP level

EaP countries have been progressing towards EU's understanding of clusters and BSO's definitions and thus have seen the emergence of such organisations⁹⁷. Multiple EU- and International-funded projects have generated the creation of clusters and BSOs in these countries, with the aim to dynamize the climate business and stimulate competitiveness amongst members.

⁹³ <https://www.intracen.org/sme/cs/Government-and-Business-Support-Organisations/>

⁹⁴ Visit website: <https://clustercollaboration.eu/content/p2greenest-supporting-eu-smes-field-circular-economy-participate-public>

⁹⁵ <https://franceclusters.fr/>

⁹⁶ Christensen, Thomas Alslev/Lämmer-Gamp, Thomas/Meier zu Köcker, Gerd, 2012: Let's make a perfect cluster policy and cluster programme. Smart recommendations for policy makers, Berlin/Copenhagen, pp. 32-34

⁹⁷ Link to report "[review of state of development of cluster in EaP countries](#)", EaP PLUS project funded by Horizon 2020

A) Clusters and Business Support Organisations

The following table presents the clusters and BSOs in P2GreenEST's horizon in EaP countries:

Country	Name	Competences	Contact	Type
Armenia	Armenian development agency	assist and advise foreign direct investors and buyers in Armenia	info@ada.am	BSO
Armenia	National academy of sciences of the Republic of Armenia *	organization uniting members and scientific staff of research institutions coordinate research in different scientific fields		BSO
Armenia	National competitiveness foundation of the Republic of Armenia		info@cf.am	BSO
Armenia	Small and medium entrepreneurship development national center	structure that implements State support to SMEs. Provides technical and financial assistance	info@smednc.am	BSO
Armenia	Union of Information Technology Enterprises in Armenia		info@uite.org	Cluster
Belarus	Belarusian Chamber of Commerce and Industry	represents the interests of the business community	mbox@cci.by	BSO
Belarus	High-Tech Park	support software industry by providing special business environment for IT business	info@park.by	BSO
Belarus	Association of legal entities «Republican Confederation of Entrepreneurship» *	largest SMEs association of Belarus, aims at promoting SMEs development, protecting them, representing them	minskinfo@mail.ru	Cluster
Belarus	Innovation Association "Republican Centre for Technology Transfer" *	Promotes cooperation between developers, technology-users and investors in the field of technology transfer	rctt.by@mail.ru	Cluster

Belarus	LED cluster	Initiative to promote the modernization of the lighting industry by developing standards and goods	info@ledcenter.by	Cluster
Georgia	Georgia's Innovation and Technology Agency *	Coordinates and mediates innovation and technology development	info@gita.gov.ge	BSO
Georgia	Georgian Chamber of Commerce and Industry *	combines the chambers of commerce and industry of the regions and autonomous regions.		BSO
Georgia	Enterprise Georgia *	Agency to support SMEs, diversify their export structure and competitiveness	een@enterprise.gov.ge	Cluster
Georgia	ICT Cluster	recent initiative, members are ICT industry stakeholders	info@ictcluster.ge	Cluster
Moldova	Invest Moldova Agency	cooperation partner for domestic and foreign investors	office@invest.gov.md	BSO
Moldova	MTTN Modovan Technology Transfer Network *	Promote technology transfer in Moldova	moraruvtl@gmail.com	BSO (AB)
Moldova	ODIMM *	Association of interests of SMEs	office@odimm.md	BSO (AB)
Moldova	CCI RM *	represents the interests of the business community	camera@chamber.md	BSO (partner)
Moldova	Energy and Biomass cluster	biomass		Cluster
Ukraine	CCI UA *	main objective: creating favourable conditions for the entrepreneurial activity	ucci@ucci.org.ua	BSO (Associated partner)
Ukraine	ICT Cluster	platform of cooperation and uniting companies of IT ecosystem	info@itcluster.kiev.ua	Cluster
Ukraine	Ukrainian Clusters portal	connects members of Ukrainian regional clusters		Cluster

*: members of EEN network. No EEN representation offices in Azerbaijan.

The following table gives an overview of clusters' sectoral division in EaP countries.

Country	Sectors						
	Energy	Natural resources exploitation	Forest / tourism / environmental	Innovation / research / medicine	Transport / logistics	Building / construction	Technology
Armenia		2		3			4
Azerbaijan	1	1	1	3	1	1	1
Belarus				4			3
Georgia				4			3
Rep. of Moldova	4	2	9	1		1	
Ukraine	7	2	5	4	1	1	

Table 1 - Cluster organisations by sectoral division in EaP countries, January 2017⁹⁸

7.3 Partners at EU level

Since the entry into force of the AA as well as the FTA with the EU, Moldova and Ukraine have progressed towards EU standards. For instance, Moldova now counts the EU as its largest trading partner. The government, turned towards the EU, has adopted a reform programme aiming at adapting national legislation to EU standards. Ukraine is also taking important steps towards its Eurocentric future, however the armed conflict in the eastern regions has affected the region and thus the country's work towards EU standards.

To only name a few, the EU has launched EU strategies in recent times that have shaped the national strategies of the Member States and beyond since:

- [A Clean Planet for All](#): EU's strategic vision published in 2018 in line with the Paris Agreement objective to keep the global temperature increase below 2°C.
- [Green Deal](#): the EU's main strategy towards climate, has the objective to shape Europe into a more sustainable, competitive, modern and resource-efficient economy
- [Fit for 55](#): legislative package put in place in order to adapt European legislation to implement the Green Deal
- [Circular Economy Action Plan](#): presents initiatives through which the EU intends to transform consumption patterns in order to achieve zero waste production
- [Strategy for Biodiversity by 2030](#): long-term plan to protect nature and reversing the degradation of ecosystems

All these strategies and action plans are supposed to make the green transition happen and give to the EU and non-EU parties concrete financial instruments and programmes to be used by the stakeholders (enterprises, researchers, public authorities) aiming to make the green transition happen.

Taking advantage of all the available funds and instruments cooperation with key strategic actors is key. SMEs need support to create partnerships and benefit from EU financing. That is why it is essential for SMEs to be part of an ecosystem (i.e. cluster, BSO, EEN network member....).

⁹⁸ Link to report "[review of state of development of cluster in EaP countries](#)", EaP PLUS project funded by Horizon 2020

A) Clusters and Business Support Organisations

The following table combines clusters and BSOs in P2GreenEST's scope of actions in the EU:

Name	Type	AB / Partnership / Associated partner	Competences	Contact
France Water Team	Cluster	Associated partner	Water	Contact form
Ea éco-entreprises	Cluster	Partner	Circular economy, energy, waste, water	contact@ea-ecoentreprises.com
Green Energy Cluster	Cluster	Partner	Bio-energy	Contact form
MetalIndustry4	Cluster	Associated partner / AB	Metal, circular economy in metal industry	Info@metaindustry4.com
FADE *	BSO	Partner	Support to SMEs, public procurement	fade@fade.es
CTA - Technological cooperation of Andalusia	BSO	AB	Innovative public procurement	cta@corporaciontecnologica.com
Rising SUD *	BSO	Associated partner	Support to SMEs	contact@risingsud.fr
FICYT – Foundation for the promotion of applied scientific research and technology in Asturias*	BSO	Associated partner / AB	Support to SMEs	ficyt@ficyt.es

*: members of EEN network

B) Relevant project consortia

Multiple projects working towards better access to public procurement in the targeted countries exist and P2GreenEST has been introduced to some of them in order to capitalize best-practices.

Amongst other EU- and International-funded projects:

Project name	Topic	Resources
EU4Business	Supporting SMEs in Moldova and Ukraine by centralizing grant or credit opportunities, improving business development skills and access to new markets	
Business-INN MOLDOVA	Closed project coordinated by CCIRM, focussing on developing capacities for support to SMEs	
SESAM	Closed project, worked on providing knowledge and support that is necessary for a successful participation in public procurement within the EU, focussing in particular on France, Germany, Italy and Poland	Video on 5 tips to win a bid
IPPON	Innovative Public-Procurement Opportunities and Networking, which worked on opportunities of cross-border procurement, developing specific content as to information set, training set, coaching, mentoring activities and match-making events	
Tenderio	(improving SMEs' access to public procurement), that developed a tool on public tenders' publications	

XPRESS	which gives support to Green Public Procurement in order to facilitate collaboration between SMEs and the public sector towards renewable energy sources in regions.	
EU4Environment	<p>Project active in the six EaP countries working towards greener societies by supporting environmentally friendly actions and mechanisms to better manage environmental risks and impacts.</p> <p>The EU4Environment coordinator for the Republic of Moldova is an active member of the P2GreenEST Advisory Board.</p>	Video on sustainable public procurement
SMEDA – support to SME Development	Project in Armenia (2016-2019), implemented by GIZ	
SME development and DCFTA in Georgia	Project from 2015 to 2019, implemented by GIZ, part of EU4Business programme	
Advice for Small Businesses , Ukraine	Project from 2010 to 2018, implemented by EBRD in Ukraine	Leaflets for SMEs

7.4 European and International donors

It is also important to note the presence and high support delivered by other international donors such as **GIZ** (Gesellschaft für Internationale Zusammenarbeit, Germany), **SDC** (Swiss Agency for Development Cooperation), **USAID**, **AfD** (Agence Française de Développement, France), **WB** (World Bank), **EIB** (European Investment Bank), **EBRD** (European Bank for Reconstruction and Development), **SIDA** (Swedish International Development Cooperation Agency), **OSCE** (Organisation for Security and Co-operation in Europe) and others.

All these donors have to be targeted by the P2GreenEST partnership. We should understand the functioning of their financial instruments (grants & investment) as they might become an important source of PP opportunities in circular economy sectors.

99

Top Ten Donors of Gross ODA for Moldova, 2018-2019 average, USD million

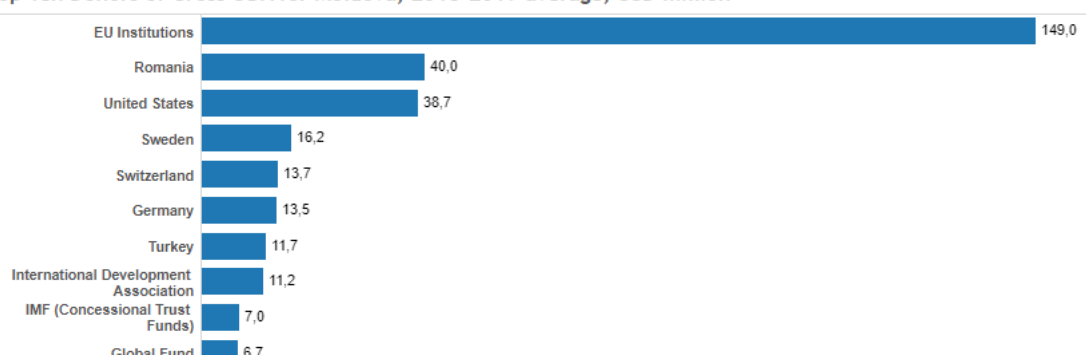


Image 14 - Top Ten Donors to the Republic of Moldova 2018-2019

Top Ten Donors of Gross ODA for Ukraine, 2018-2019 average, USD million

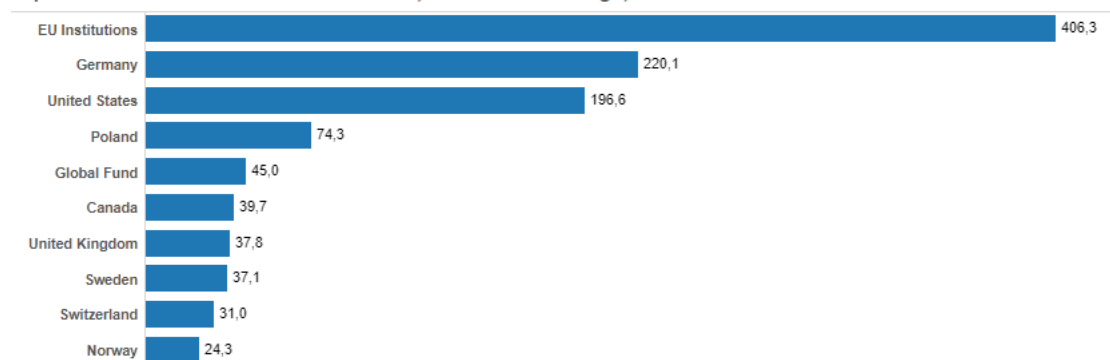


Image 15 - Top Ten Donors to Ukraine 2018-2019

The following table summarizes the actions from European/International donors and their thematic sectors of activities:

⁹⁹ <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/aid-at-a-glance.htm>

Name	Country	Sector	Type of financing	Remarks
European and International donor (financial) institutions				
WB (RM & UA)	International	<ul style="list-style-type: none"> - economic governance - service governance - skills development - reform an inefficient and inequitable housing subsidy system - reintegrating the conflict-affected regions - responding to the COVID-19 pandemic 	Grants, IBRD, IDA, development policy loans, program-for-results operations, guarantees	12 active projects in RM, 11 IBRD projects, 1 Program-for-results
EIB (RM & UA)	Europe	<ul style="list-style-type: none"> - energy efficiency, diversification of sources - renew waste management services - develop private sector and SMEs - transport - municipal and social infrastructure 	Loans, ProCredit Bank involved	24 projects since 2007 in RM, 51 projects since 2007 in UA
EBRD (RM & UA)	Europe	<ul style="list-style-type: none"> - support private sector development (RM) - promote European standards and regional integration (RM) - enhance commercialisation and sustainability of municipal enterprises (RM) - promote privatisation of the public sector (UA) - promote rule of law and fair 	Loans, grants	51 active projects in RM, 206 active projects un UA

		<ul style="list-style-type: none"> competition in the private sector (UA) - strengthen energy security (UA) - enhance resilience of the financial system (UA) - facilitate trade and investment (UA) 		
OSCE (RM & UA)	Europe	<ul style="list-style-type: none"> - conflict prevention and resolution - rule of law - tolerance and non-discrimination - national minorities issues - human rights - confidence-building measures 		
USAID (RM & UA)	USA	<ul style="list-style-type: none"> - economic growth - democratic governance - peace and security - health 		130 activities in RM, 340 activities in UA
Agencies of development and aid implementing projects				
GIZ (RM & UA)	Germany	<ul style="list-style-type: none"> - sustainable economic development (RM & UA) - good governance (RM & UA) - energy efficiency and climate (UA) 		Currently 10 projects in RM, 33 projects in UA. Implements projects from German ministries as well as for the EU and development agencies of other EU member states.
SDC (RM & UA)	Switzerland	<ul style="list-style-type: none"> - water and sanitation (RM) - health (RM & UA) - migration and development (RM) - gender equality (RM) 	Grants, Small grants programme for local initiatives	Currently 83 projects in RM, 22 in UA

		<ul style="list-style-type: none"> - disaster risk reduction, emergency relief and reconstruction (RM) - sustainable cities (UA) - SMEs and competitiveness (UA) - governance and peacebuilding (UA) 		
AfD - PROPARCO (RM & UA)	France	<ul style="list-style-type: none"> - sustainable development - economic growth 	PROPARCO is the financial institution of AfD, promoting private investments towards growth and sustainable development.	Recently started their actions in Moldova, no projects yet.
SIDA (RM & UA)	Sweden	<ul style="list-style-type: none"> - economic integration with the EU and development of market economy - democracy, human rights and rule of law - environment and climate change 	implements UNDP, EBRD, OSCE projects	