

Annual report – 2021



Dear friends, nature lovers and fans of the NGO "ECOSPHERA"!

The year 2021 is over and we are happy to report on our work for the whole year, our successes and results. Due to the introduction of quarantine restrictions in March 2020, we conducted some educational activities online. However, the NGO Ecosphere was able to implement most of the planned projects in compliance with security measures. In particular, to hold a summer children's camp, to take part in an international youth camp in Serbia, to invite experts from Austria to one of the trainings, to make a working trip to Romania. We have continued our work in the areas of energy efficiency, community RES development and climate change prevention, sustainable waste management, and environmental education. "Green School" for school-age children, research on the biodiversity of aquatic ecosystems of the region.

This year we launched a new analytical project together with the NGO "Zero Waste Lviv" to analyze the implementation of national policies and regional strategies for solid waste management in Lviv and Zakarpattia regions of the Carpathian region.

We are also studying the role of dead wood in protected and exploitation forests to increase their resilience to disease, natural disasters and climate change. In 2021, we continued to work towards organizing a composting system in educational institutions. In particular, they implemented the project "Do not fall! Compost" in the village of Velykyi Bychkiv, where a pilot composting site was created on the territory of Velykobychkivska Secondary School of I-III grades. The organization's experts also conducted educational and educational work as part of a two-day seminar for students and teachers.

Read about each of these projects in our report.

Sincerely,

Team of the NGO «Ecosphera»

► DIRECTION OF WORK: *ECO-EDUCATION AND UPBRINGING*

Program: **Green School (2021)**

Modern youth needs to master new competencies. It can be technical competencies, artistic and ideological. The task of the NGO "Ecosphere" is to educate children and young people in a responsible attitude to nature, an active position on environmental protection. We involve children in environmental activities, offering them the acquisition of new competencies that needed by every modern child.

*Children can join the bird watching by working independently
binoculars identifying bird species. They learn to photograph and drive*

*video, choose the right photo theme and use the rules of photography to make the photo look good. They also learn to create cartoons, develop websites, create full-fledged videos. This is the **Green School***



Territory of activity: Transcarpathian region.

Objective: to form environmental awareness in students and involve them in environmental activities.

Result:



In February 2021, we held a winter EcoSchool on the topic "Let's take care of our river!" Students learned the basics compositions, mobile video recording, types of angles and techniques in video recording. Theoretical knowledge children applied to practice, shooting landscapes on the river Uzh. Children were introduced to professional programs for video editing, and on the last day of the "Green School" for children conducted training on creating their own websites and blogging on environmental issues. In two months we held an online event, where we watched the created videos about the river, analyzed the concept and technical component of each material.

In April we held a spring Eco-School "Solid Waste Management". At the training in Vynohradiv and Korolevo, experts from the Ecosphera NGO told the children how important it is to avoid unnecessary shopping and prolong the life of things they wanted to throw in the trash. The children worked in groups and discussed various ways to reduce waste.





In the summer we managed to organize a summer children's camp in the Volovets region. For five days the children played sports, learned spoken English, and painted eco-bags, participated in master classes on creating photos and videos, held team games and received gifts: T-shirts, notebooks and branded badges.

During the excursion to the forest, Oksana Stankevich-Volosyanchuk, an ecologist from the Ecosphera NGO told the children about the value of virgin and dead wood. Formation of ecological in children culture - one of the main tasks of today! Під час екскурсії до лісу екологиня ГО «Екосфера»

You can find out more about the camp [on our website](#), as well as in the videos:

<https://www.facebook.com/watch/?v=790870411574427> and [on YouTube](#).

Thank for support of the Department of Youth and Sports of the Zakarpattia Regional State Administration, as well as the PettersonApps company, which is engaged in Web and mobile development.





In 2021, our organization joined the Climate Mobilization - an all-Ukrainian action aimed at drawing the government's attention to the fight against climate change. A lesson was held with Uzhhorod schoolchildren on the topic: "The connection between climate change and floods and droughts in the Carpathians region of Ukraine".

We discussed with students the areas of economics that increase the negative impact on the climate. Namely: forest, rural and utilities. Ways to improve the situation were considered: composting, waste sorting, maintaining the cleanliness of rivers and banks, stopping the harmful practice of extracting sand-gravel mixture, changing the practice of forestry.

In October, the NGO "Ecosphera" organized a training about composting with the participation of Austrian experts, representatives of **Verein Gartenpolylog Kordula Fotch** and **David Stanzel**. The event was organized with the support of **Kooperationsbüro Lemberg - Austrian Cooperation Office** in Lviv and Stadt Wien.

Austrian experts told the children about the types of composters, composting methods and features of this process. In the practical part of the master class, participants worked in several groups. While some students developed information posters, other students crafted a simple one composter.



The finished structure was covered with cardboard and filled with the required amount of water, soil, leaves and organic matter. In this way, children realized that composting is a simple process, but it makes a significant contribution to the preservation of our planet.



In October, [we conducted a training "Autumn EcoSchool"](#) on the topic "Let's take care of our river!", where young people learned to prevent waste and analyze their own impact on the environment.

Representatives of the NGO "Ecosphere" visited schools in Vynohradiv in order to spread the idea of abandoning plastic bags. Together with schoolchildren they made eco-bags for use in everyday life.

In December, together with the participants of the Winter EcoSchool training, [we made Christmas decorations](#) from environmental materials as part of the waste reduction training. The advantage of such decorations is that they can be updated every year, thus not only saving money on New Year's decor, but also getting a real charge of positive emotions.

Classes were held with students of Uzhgorod schools №19 and №15.





Children from Vynohradiv also took part took part in the Winter EcoSchool trainings. Today, the trend is handmade eco-bags. These were made by schoolchildren who chose the design to their liking and with the help of representatives of the public organization painted their own eco-bags. The participants of the training also received a Green School T-shirt as a gift.

Activities under the Green School program will continue in 2022.

Partners: Department of Youth and Sports of the Zakarpattia Regional State Administration, club “Window on America”, PettersonApps company, Kooperationsbüro Lemberg - Austrian Cooperation Office in Lviv and Stadt Wien.

International Youth Camp in Serbia (2021)



In December 2021, the NGO "Ecosphera" joined the international youth camp. This year - in the picturesque Serbian city of Kragujevac. Participants from Ukraine, Northern Macedonia, Albania, Serbia and Germany for 10 days learned about the cultural features of their countries and learned to develop their own exchange projects.

Every day the participants of the camp exchanged views on different worldviews through communication, moving games, conversations, active recreation. In group sessions, it is possible to understand the diversity that each participant brings.

About the acquired knowledge and the atmosphere of the camp [we wrote on our site](#).

Regional Energy Days (2021)

In July, as part of the regional Energy Days in Maly Galagov Park, the Ecosphere NGO in partnership with the Uzhhorod City Council, AVE LLC and the International Association MAIRR Regional Development Institutions Deploy a Real Ecological Town: City of the Future Installation with Green Lawns and Solar Panels on Roofs, Electric Car, Solar collector, solar-powered toys that showed children the energy of the sun, a location that became an example proper sorting of garbage.





The children especially enjoyed the master classes, where they painted eco-bags, created a mini-garden in a pot and made stands for the office with ordinary paper cups! Thus, giving new life to used things.

We aim to draw people's attention to the obvious problems of climate change and the need to change our own household habits. For example, one of the locations showed the city of the future: what can be a city, in which direction to move to save energy and use as little fossil fuel as possible.

You can join this environmental movement in different ways: reduce waste, use it ugly used things, replace lighting with energy efficient ones (LED bulbs), install heat, water, gas meters and adjust consumption of these resources, turn off lights and appliances that do not used, composting organic waste, participating in tree planting campaigns, buying goods and things with a low carbon footprint, using renewable energy sources if possible.

The Ecosphere NGO has been participating in the organization of regional Energy Days for 4 years in a row. Representatives of the "Ecosphere" tell the participants about the anthropogenic causes of climate change and the consequences of these changes, as well as find out what the carbon footprint is. Think about how everyone can reduce their daily carbon footprint and help their city, country, the planet as a whole.

With the help of exciting master classes we can show children that almost every thing can be used to good advantage, instead of throwing it in the trash. It develops creativity, creative abilities in children, and most importantly - instills in them an understanding of natural processes and the dangers of destructive human impact on the environment.

You can learn more about our event [in the material on our website](#), as well as in videos:

<https://www.youtube.com/watch?v=5T41o-w-noU>

<https://www.facebook.com/ekosphaera.ua/posts/2883577645290183>

https://www.youtube.com/watch?v=wFZ52L_LDRM&ab_channel=Tv21%D0%A3%D0%BD%D0%B3%D0%B2%D0%B0%D1%80

https://www.youtube.com/watch?v=zWWqQpeVmlI&ab_channel=EKOSPHERA

► DIRECTION OF WORK: ENVIRONMENTAL RESEARCH ON MONITORING

- Forest ecosystems, sustainable forest management, forest policy and FSC forest certification

Project 2: Promoting dead wood for sustainable forests in the Romanian-Ukrainian cross-border region! (RESFOR)

Dead wood (ie semi-dying, standing dead or dying trees, fallen logs and branches, fallen trees that have already decompose) - the most important component in the structure of the forest and its functioning. It plays a key role in support forest productivity, natural regeneration, biodiversity conservation, increased resilience to climate change and provides a range of ecosystem services to local communities and the general public. So, adequate management of dead wood makes an important contribution to sustainable forest management and certainly contributes to mitigating some of the effects of climate change.





However, the issue of sustainable treatment of dead wood is relatively new a concept in the forestry of Romania and Ukraine, which has been gradually advancing since 2000 and which, as a rule, has not yet been understood in practice. For decades, the timber industry of Romania and Ukraine considered dead wood to be the "enemy of the forest", and Efforts were made to systematically remove it from forests in accordance with forest norms and rules (for example, sanitary rules in Ukraine allow leaving no more than 5 cubic meters of dead wood per 1 ha in the forest).

*This practice has led to a critical decline in numbers and, in some cases, the extinction of many forest species (for example, the white-backed woodpecker *Dendrocopos leucotus* or the deer beetle *Lucanus cervus*, which are now listed in the Red Data Book of Ukraine). The extinction of a large number of species greatly simplifies the structure of biotic groups of the forest ecosystem, which makes it vulnerable to external factors, incapable of natural regeneration and self-renewal. These vulnerabilities have ultimately led to additional costs in forestry for artificial regeneration and to serious economic losses from the loss of large areas of forest as a result of natural disasters, the spread of pests, the effects of climate change..*

Territory of activity: Transcarpathian region and Ivano-Frankivsk region of Ukraine and Maramures and Suceava counties of Romania

Objective: to provide conditions for cooperation, innovation and research on the topic harmonized practices of responsible forestry dead tree management farms. Achieve recognition of importance treat dead trees and demonstrate an innovative approach to increasing the resilience of forests by implementing best practices in dead tree management in production forests in the target area of the project

Ensure the promotion of research results on long-term productivity and

resilience of forest ecosystems to climate change to regulatory documents, lobby and create the conditions for the continuation of specific research..



Result:

- [GEP-analysis](#) on the condition of dead wood in Europe and Ukraine;
- [Guidelines](#) for the management of dead wood in commercial forests have been developed;
- An educational program for schoolchildren "Why is the forest dead wood?" and issued [Illustrated information manuals](#) in Ukrainian-English and Romanian-English versions;
- In September 2021 on the basis of the Coal Shirokoluzhansky reserve massif of the Uholsk-Shirokoluzhansky Reserve of the Carpathian Biosphere Reserve, where the most famous UNESCO beech virgin forests are located, [conducted educational and practical classes](#) for students of the Faculty of Biology of Uzhhorod National University.
During the seminar, students were presented with professional scientific information on dead wood in the forests
a separate specific habitat for thousands of forest biological species - mucous membranes, fungi, mosses and lichens, insects and vertebrates. Demonstrated the functional role of dead wood, which enhances the resilience of forests to external influences, including climate change.



- A textbook for students "Dead wood as a component of the forest ecosystem" has been published»
- A training for project partners was held in Romania ідбувся тренінг on October 4-8 within the project "Promoting Dead Wood for Sustainable Forests in the Romanian-Ukrainian Cross-Border Region!".
У рамкахThe program visited the virgin forests of Romania: Slatioara beech-fir-spruce virgin forest, a UNESCO natural heritage site, and Humus beech virgin forest, which has the status of a national reserve. Ukrainian project partners were also shown the capabilities of the dendroanatomical laboratory of the Faculty of Forestry of Suceava University



November 23-24 on the territory of NPP "Uzhansky" in the village Sil відбувся науково-практичний семінар scientific-practical seminar "Improvement of dead wood management" took place. The event was organized by the NGO "Ecosphera" in partnership with NPP "Uzhansky"

An information seminar was held in Uzhhorod in December "Dead wood - living forests" for all stakeholders and journalists about the results of the project.

Partners: WWF Romania in partnership with the University of Suceava, UkrRIMF

More about the seminar you can find out [on our website](#), or [on Tv21 Ungvar](#).

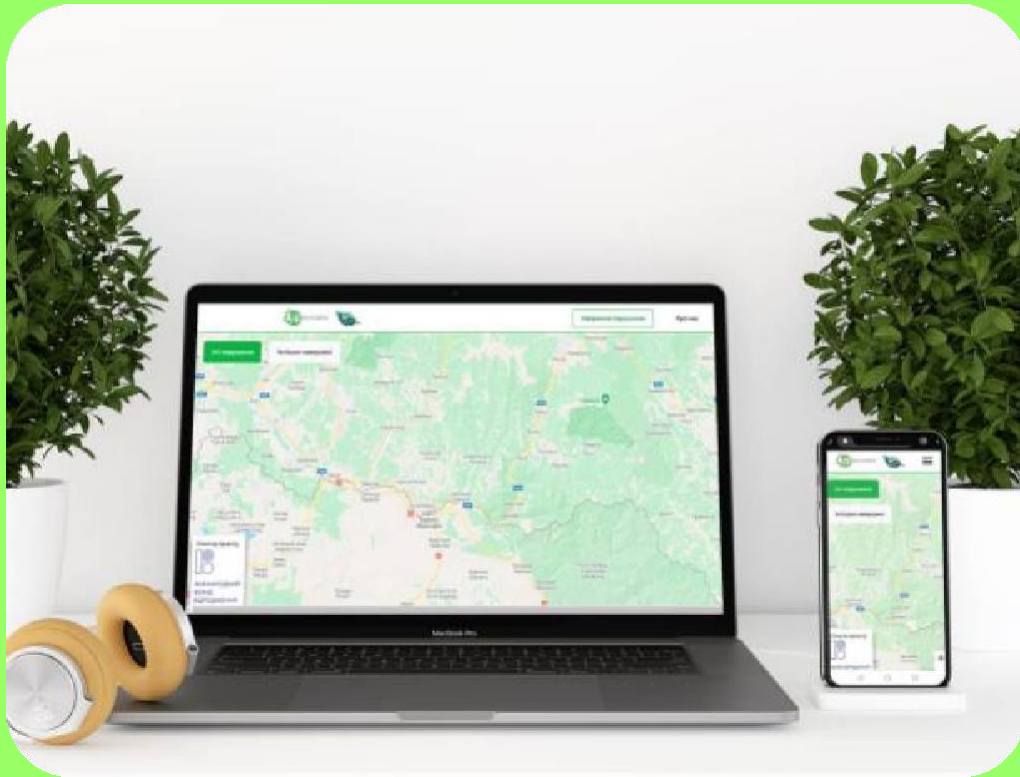
Project 3: Creating an online tool for capturing and visualizing on the map of forest offenses

During 2021, the NGO "Ecosphera" worked in the field of involving active citizens of Transcarpathia in public control over the use of forest resources of the region.

As a result of expert work of the organization's specialists, as well as field information collected in the framework of the established public information network, the main problems in the forestry of the region (and country), including the causes of these problems. Among the reasons were: 1) weak efficiency of the state body of ecological control - the State Ecological Inspectorate; and 2) inaction of law enforcement agencies, in particular the National Police (<http://ekosphera.org/category/publications/documents/>).

As the experience of our work has shown, it is possible to influence the situation through 1) maximum publicity and quality coverage of cases in the media; 2) professional and qualified work with the use of various methods, such as the use of remote sensing of the earth, geolocation in photo documentation, analysis of maps of the technological process of logging, video recording by quadcopter. These methods make it possible to gather irrefutable evidence for state control and law enforcement agencies.





As part of the project, we created a website and a mobile application through which anyone who sees an offense in the woods will be able to publish it. After two levels of verification of this information, it will become public and online. The mobile application and website is a quality information resource for the media, law enforcement agencies, DEI and other public authorities. By Our experts form official appeals to the SEI in the Zakarpattia region and the National Police on the facts of violations. The results of these appeals are displayed on the site. This is how we keep online statistics on the implementation / non-implementation of control actions provided by law.

See more about the mobile application [on our YouTube](#).

This approach reduces the ability of the SEI and law enforcement agencies not to respond to our appeals, and thus reduces the possibility of corrupt actions of these state control structures.

Area of activity: Zakarpattia region of Ukraine

Goal: to reduce the ability of law enforcement agencies and the state environmental inspectorate to commit acts of corruption, which are expressed in non-fulfillment of their official duties by creating an online tool for recording and mapping visualization of forestry offenses and provide extensive coverage of illegal logging and irrational use of forests Transcarpathian region.

Results:

We have created efficient and prompt [a running mobile application Legal Forest](#), as the main tool for publicity and reducing the capacity of state regulatory authorities to act against corruption. There is also a website www.savecarpathianforest.org, harmonized with the mobile application, which displays complete information on all recorded incidents.

We created [video instruction](#) for using the mobile application, and also reported on the first successes of the site [on the TV-Channel Suspilne | Zakarpattia](#), а також [on the channel TV21 Ungvar](#).

You can read more about the resource here:

<https://ekosphaera.org/stop-lisoporushennya-yak-gromadskist-mozhe-zapobigaty-nezakonnym-rubkam-u-lisi/>

https://goloskarpat.info/society/5fd9bc2387caf/?fbclid=IwAR34Ozck6oFTm-A6fJu1iBUtOlbFy_mHfnHtkwWsxVBIPw07zx-T1QshhY

https://zakarpattya.net.ua/News/204958-U-lishospi-na-Tiachivshchyni-zavdiaky-hromadskosti-ekoinspektsiia-zafiksuvala-nezakonnu-rubku-derev-DOKUMENT-VIDEO?fbclid=IwAR3ssCI7gK4dtpkDQ9tx8iC22VlxEdJ8Mgr_TSBgM3iQ31Z8r0o32wD3wqk

Partners: The International Renaissance Foundation (IRF)

- Aquatic ecosystems

Project 4: Joint measures to prevent natural disasters in the cross-border basin of the Uzh River (2019-2022)

The main problems of the Uzh Basin, which is 2750 square kilometers in Ukraine and Slovakia: floods that occur at any time of year, cause significant environmental and economic damage, while there is an anomalous shortage for a long period of water during droughts, leading to many problems, including deteriorating water quality.

The project measures meet the requirements of modern European water policy, in particular, the EU Water and Flood Framework Directives, certain provisions of which Ukraine undertook to comply with after signing the Association Agreement with the EU in November 2014. Thus, the mapping of flood risks under the project will be performed according to the new national methodology, which takes into account the requirements of the EU Floods Directive. This means that the project will develop maps and documents for the safety of Uzhgorod residents based on the same standards that are currently being implemented in the European Union.

Territory of activity: more than 2000 sq. km on the territory of Ukraine and 740 sq. km - in Slovakia.
The total length of the Uzh River within the project is 133 km.

Goal: to ensure effective flood protection of the inhabitants of the Uzh river valley in its Ukrainian part, as well as to develop measures for flooding the Uzh in the low-water period and drought, taking into account the results of research on the river ecosystem.

Results of the NGO "Ecosphere" in the framework of the project implemented in 2021:

1. We conducted 15 trainings for children on the conscious management of garbage, ways to reduce waste, the risk of human interference in natural processes in the biosphere, culture consumption, when people buy more goods than they need for living needs. All this leads to the formation of millions of tons of plastic waste, which falls into the sea every year. Plastic does not disappear in water, but simply becomes smaller - microplastic, which birds and marine mammals perceive as food. In our workshops on Plastic Pollution and Groundwater Pollution, we help children understand that a river is an entire ecosystem, not a resource or a sewer where people dump their own waste. We help children understand that a river is an entire ecosystem, not a resource or a garbage can where people dump their own waste. People's actions can cause floods, as targets are already being formed in Zakarpattia [traffic jams](#).



It is better for children to understand all these processes through interactive methods: creation of photo and video materials on the topic of pollution of rivers and shores. Students not only gain valuable knowledge and professional skills, but also experience the consequences of human activities and the devaluation of natural resources.

As part of the curriculum, students of Uzhgorod schools were tauhqg the basics of composition, mobile video recording, mobile video editing skills. The children applied theoretical knowledge in practice, photographing landscapes on the river Uzh.

We also taught children to create design sites that they can fill with their own photos, videos and other content on environmental issues. We hold competitions for the best photo of the river and its inhabitants, thus increasing children's interest in learning about the river ecosystem, understanding that it needs to coexist in harmony. Together with the children we watched a video about the river, analyzed the concept and technical component of each material. The experts provided their recommendations on this further development and implementation of new creative projects. Our curriculum helps to shape adolescents' European vision for everyday life.



1. *Informational work in the media about the study of the river and activities with students.*

More about workshops [can be found in the material of the TV channel '21 Uzhhorod'](#) and also [on our YouTube channel](#).



In March, specialists from the Ecosphere NGO [conducted a series of online workshops](#) with training participants. We also discuss with children how to deal with litter in different European countries. And also how each of us can be affected by the situation. In particular, choose things that are reusable: eco-bags, drinks in glass bottles. Discard disposable packaging, straws and others "Disposable" plastics. Use reusable utensils at work, leisure, walks. At the end of the trainings we conducted a quiz to test the acquired environmental knowledge. The most diligent students received branded magnets "I save nature".

2) 90% of biodiversity studies have been carried out in the Uzh River basin, with a focus on the Uzhhorod area. The impact of the regulatory structure on the environment is studied..

Donors and partners: Cross-border cooperation program Hungary-Slovakia-Romania-Ukraine ENPI 2014-2020, Basin management of water resources of the river Tisza, Austrian Bureau of Cooperation in Lviv and Vienna. Window on America Uzhhorod, PettersonApps company, Department of Youth and Sports of the Transcarpathian Regional State Administration.

Project 5: Strengthening cross-border security through joint measures to prevent floods and inland flooding between the Tisza and Tour rivers! (2019-2022)

The floods in Transcarpathia in 1998 were a natural disaster that occurred as a result of heavy rains on November 3-5. Then came out of the banks of the rivers Tisza, Tereblya, Teresva, Borzhava, Latoritsa and others, which flooded almost 120 settlements. About 350 thousand people were in the disaster zone. The villages of Vynohradiv region suffered the most then.

The 2001 flood was no less catastrophic for the region. In order to further prevent natural disasters, a cross-border project has been set up between Ukraine and Hungary. Cooperation "SAFETISZA" - "Safe Tisza", which aims to protect the territories and populations of Vynohradiv district of Zakarpattia region and the region of Sabolch-Sotmar-Bereg from floods and wastewater.

The main infrastructural element of the project on Ukrainian territory is the reconstruction of 9.5 km of the left bank of the Tisza River in the area between the villages of Tekovo and Gotenya, as well as the construction flood control center in the village of Tysobyken, Vynohradiv district.

Territory of activity: joint Ukrainian-Hungarian Batar reclamation system (Vynohradiv district of Zakarpattia region and in the Szabolcs-Sotmar-Bereg region in Hungary).

Goal: strengthening transboundary water management and reducing the risk of flood damage within the Batar reclamation system. The project aims to strengthen the stability of the regions on the border of Ukraine and Hungary by implementing a comprehensive flood control activities, which will strengthen adaptation to climate change and improve joint disaster management in the Tisza River basin.

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The result was achieved by the NGO "Ecosphera" in 2021:

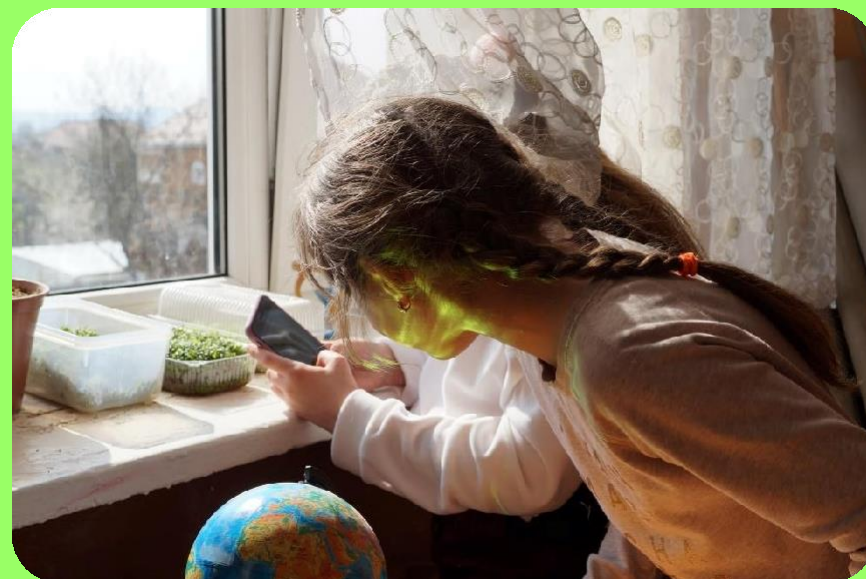
1. We conducted 16 trainings for schoolchildren of rural schools of Zatyssyansk region and schools in Vynohradiv on solid waste sorting, research of river ecosystems, plastic pollution of water bodies, groundwater pollution, waste reduction routes. By learning the techniques of photography and video, children gain valuable theoretical knowledge. And in order to master them well, we conducted a training together on the banks of the Tisza River, where children created video content based on the acquired knowledge. For some time, at the initiative of students, the Queen held a riot on the river to appeal to local residents about the proper management of waste.



Representatives of the NGO "Ecosphera" discussed with children the sectors of the economy that increase the negative impact on the climate: forestry, agriculture and utilities. Alternative methods of utilization of leaves and dry grass were identified - composting, as well as waste sorting, development of renewable energy sources, support of all-Ukrainian eco-initiatives.

Thanks to the curriculum, children understand that the ecosystem is a holistic natural complex formed by living organisms and the natural environment. They are endowed with energy that people often seek to use for useful purposes. However, natural ecosystems provide ecosystem services that guarantee the conservation of biodiversity.

In today's reality, it is no longer enough for us to simply reduce the negative impact on the environment, but also to help nature recover. Under other circumstances, future generations may be left without rivers, forests and steppes.



2. *An information campaign about the project on the Tisza was conducted in the media and social networks..*
3. *1000 magnets of 4 types with photos of flora and fauna of the Tisza River were issued. The next stage: making a calendar and bookmarks, using photos taken by children who became participants in our trainings.*

You can see more about the events [in our video](#).

Partners: Tisza River Basin Management, Department of Education and Science, Youth and Sports of the Transcarpathian Regional State Administration.

Why do floods occur, how are they related to floodplain development and the lack of management of the local reclamation canal system, and what is the main cause of floods in the mountains? Oksana Stankevich-Volosyanchuk, an ecologist from the Ecosphere NGO, told all this to the UkrInform online publication:

<https://www.ukrinform.ua/rubric-regions/3280587-voda-z-gir-akoi-ne-pamataut-90ricni.html>

DIRECTION OF WORK: SUSTAINABLE COMMUNITY DEVELOPMENT

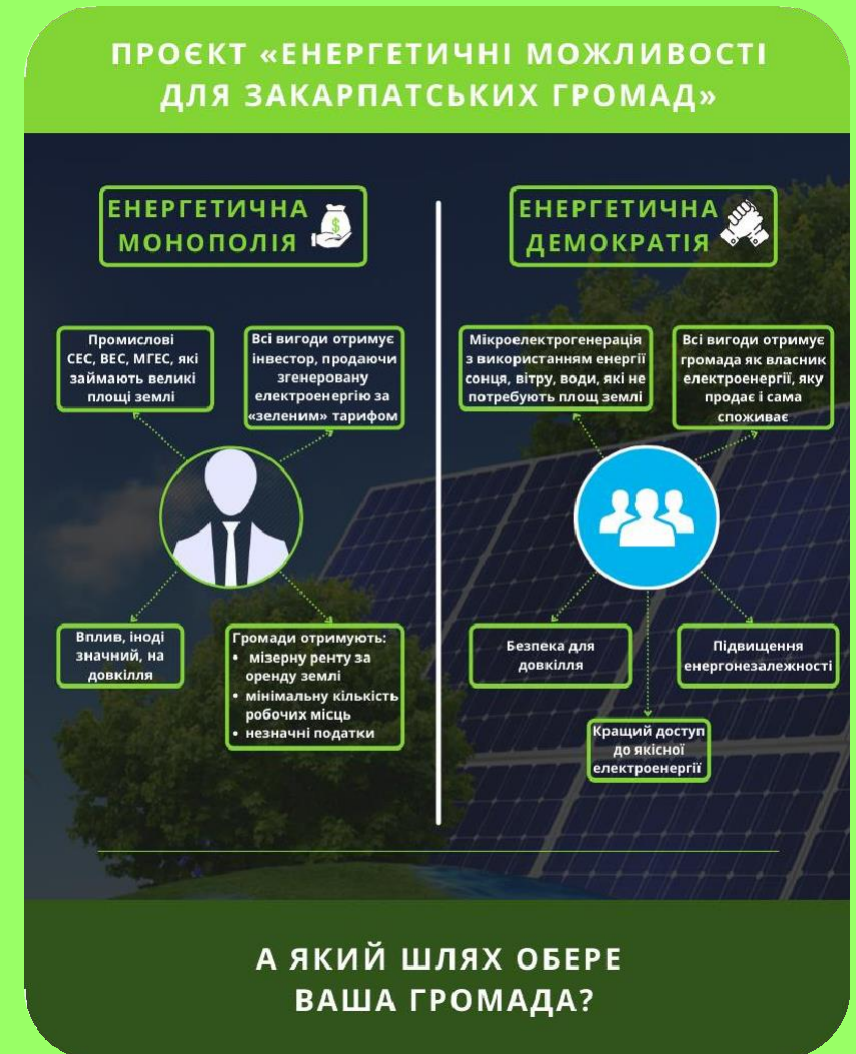
○ Energy efficiency and development of RES

Project 6: Energy opportunities for Transcarpathian communities (2020-2022)

Ukraine currently has a monopoly on energy in the energy sector. This not only does not contribute to the rapid development of the country's economy, but also often creates serious problems for remote communities in the Carpathians, where power grids are worn out.

Thanks to new technological opportunities, political will and activism of citizens, energy democracy is developing in many countries - a system in which local communities are actively involved in the selection and creation of their own local micro-networks of electricity generation with private capital,

in particular, through the creation of energy cooperatives. The basis of energy democracy is the technological capacity to generate electricity from disparate, publicly available renewable sources, such as the sun, wind, water or ground heat. In this way, more and more communities are moving towards becoming energy independent. Created models of local micro-networks can be both completely autonomous and connected to common power grids. Such examples are the most attractive for communities living in mountainous areas of the Carpathian region of Ukraine,



in particular, remote from regional and district roads, in remote villages and hamlets.

Today in Ukraine there are legal prerequisites for the development and development of models of energy generation with the lowest costs for security of energy supply from local natural resources, which are based on the ideas of energy democracy. The aim of this project is to spread this idea to improve the access of the inhabitants of the most isolated settlements in the Carpathians to quality energy supply services from renewable energy sources.

Territory of activity: Zakarpattia region

Goal: to demonstrate and disseminate the ideas of energy democracy to provide residents of remote communities in the Carpathian mountains with affordable, reliable, sustainable and secure energy by increasing the production of renewable energy.

The result:

We conducted a series of seminars and consultations in 10 mountain communities on the possibilities of creating their own micro-networks of RES based on existing natural resources (sun, wind and water) with the participation of private capital based on cooperation. The events took place in Dovzhanska, Vilkhovetska, Neresnytska, Velykobyckivska, Tyachivska, Solotvynska, Nizhnevoritskaya, Keretskivska, Dubivska and Kholmkiivska territorial communities. We also ran a media campaign among the inhabitants of Zakarpattia on energy democracy and ways to implement it: wrote about



american model of energy cooperatives, decentralization of energy market services in Germany and on the way to increase the energy independence of communities in Zakarpattia.

As a result, we selected 4 pilot communities - Dovzhanska, Neresnytska, Vilkhovetska and Nyzhnyovoritska - with which we will continue to work. Together with the locals experts discuss strategic directions for the development of distributed RES generation in communities and improving the energy efficiency of communities. The implementation of ambitious projects requires a Community Development Strategy and relevant programs.

Thus, the NGO "Ecosphere" promotes the ideas of energy democracy in local energy policies of TG.

Partners: USAID Energy security project

Грантова ініція Grant initiative "Energy Opportunities for Transcarpathian Communities" implemented by the NGO 'Ecosphera' was made possible by the support of the American people through the United States Agency for International Development (USAID) through the Energy Security Project.

- 1. In July 2021, the NGO "Ecosphera" took part in signing a memorandum of cooperation on the establishment and operation of the Regional Hub "Danube Energy". In the official part, in addition to the organization's experts, the Department of Euroregional Cooperation of the Transcarpathian Regional State Administration, the Department of Economic Development of the Uzhhorod City Council, the Transcarpathian Regional Branch took part. Association of Ukrainian Cities, Uzhhorod National University, NGO "Center for European Initiatives", International Association of Regional Development Institutions "MAIRR", Agency for Regional Development and Cross-Border Cooperation "Zakarpattia".*





Oksana Stankevych-Volosyanchuk, an ecologist at the Ecosphere NGO, presented to the participants the experience of working in the field of sustainable energy. In particular, the prospects for the development of RES and energy democracy in the framework of the project "Energy Opportunities for Transcarpathian Communities". One of the tasks of the Danube Energy Regional Hub is to lobby the interests of communities in order to attract investment and finance projects in the field of energy efficiency and energy saving. In promoting our ideas, we have gained many partners who also work in the field of energy efficiency.

You can read more about the event on our website: <https://ekosfera.org/go-ekosfera-provela-majster-klassy-dlya-ditej-ta-molodi-u-ramkah-regionalnyh-dniv-energii%cc%88/>

- Sustainable waste management

Project 7: Don't fall - Compost! (2021)

In a survey of schoolchildren in rural areas on waste management, we noted that the practice of incineration is common in most villages. Including "green" waste, ie fallen leaves, cut branches, tops, etc. in my garden.

In autumn and spring, piles of green waste are burned in the village for weeks, and poisonous smoke spreads to the outskirts and outside the village. This phenomenon is so common and common that no one pays attention to the fact that a ton of smoldering leaves emits 30 kilograms of carbon monoxide (it binds to hemoglobin in the blood, blocks the supply of oxygen to body tissues) and 9 kg of smoke microparticles. They include dust, nitrogen oxides, carbon monoxide, heavy metals and a number of carcinogenic compounds. Benzopyrene is released in the smoldering leaves without access to oxygen, which can cause cancer in humans. In addition, smoke releases dioxins into the air - one of the most toxic substances for humans. Combustion also releases carbon dioxide, which is one of the greenhouse gases that causes climate change on Earth.

The problems of incineration of green waste and air pollution with toxic substances can be eliminated by gradually changing the practice of incineration to the practice of composting in settlements. Instead of poisonous smoke, residents can get high-quality fertilizer for greenery, gardens and orchards.

Area of activity: *the village of Velykyi Bychkiv*

Goal: *to promote sustainable management of "green" waste and prevent the burning of organic matter in the village of Velykyi Bychkiv by acquainting residents with the possibilities and ways of organizing the composting system in households and creating on the basis of Velykobychkivska Secondary School №1 demonstration site for organic waste.*

Results:

In May 2021, experts of the public organization [conducted educational work with students](#) of Velykobychkivska school. At the trainings, children were taught how to properly handle solid waste and compost organic waste. We have published and distributed the information booklet "Compost - Save the Earth!".



You can watch the material about this event [on our YouTube channel](#).

This school has already started composting of green waste. There are 2 composters on the territory of the school: one won 2 years ago within the framework of the all-Ukrainian project "Kompola", and another wooden composter, made by the initiative of the employees of the educational institution within the project "Don't fall! Compost!" for composting fallen leaves. Also, the NGO "Ecosphere" gave the school a shredder. This composting site has become an example of sustainable management of bio-waste in rural areas, which encourages composting and fertilization, rather than incineration and air pollution.

You can watch a video about the success story of Velykobychkivska School [on our YouTube channel](#).

The project "Did not fall! Compost!" implemented with the financial support of the NGO "Tovarustvo Leva" (Lviv, Ukraine) with the National Endowment for Democracy (Washington, USA)

Partners: National Endowment for Democracy (NED), NGO "Tovarustvo Leva" (Lviv, Ukraine)

Project 8: Analysis and monitoring of the implementation of national policy and regional strategies for solid waste management in the regions of the Carpathian region of Ukraine! (2021-2022)

Every year during the spring-autumn floods, tons of plastic garbage float along the Tisza cross-border river to Hungary causing international scandals, imposing fines on the state of Ukraine, and diplomatic notes from the Hungarian.

All this worsens not only the international image of Ukraine, but also the state of the environment in the Transcarpathian region and its tourist attractiveness. After all, for 20% of the mountain population of the region there are no services of centralized garbage collection and removal. Where these services exist, there are often problems with its disposal, as local landfills are already closed and official landfills operating in the region refuse to accept previously unsorted waste.

Today in the region there is a very tense situation with solid waste, the lion's share of which is generated in households. This situation has been going on for 10 years. Transcarpathia has had a relevant Waste Management Strategy for 15 years since 2013. A separate operational goal of the Transcarpathian Regional Development Strategy for the period 2015-2020 has been set aside to address this issue, but the regional authorities have not advanced in these years in solving the issue of establishing a system of selective garbage collection in all settlements of the region.





With the help of the organization "Ecosphere" since 2013, a system of selective garbage collection was established in the mountain villages of Volovets and Mizhhirya districts, where before, due to the lack of their own rural landfills, all garbage was in the environment. Today, the problem of solid waste in these villages, which are located in the upper reaches of the river Latorytsya and in the valley of the river Tereblya, practically solved.

However, it is impossible to solve the problem of garbage recycling in the region by

non-governmental organizations and rural territorial communities. A separate operational goal is present in the current Regional Development Strategy of the Zakarpattia region for the period 2021-2027. Analysis and monitoring of the implementation of the National Waste Management Strategy until 2030 and existing strategic documents in the field related to TPB will allow us to identify the reasons for the systematic "slippage" of this issue at the Transcarpathian Regional State Administration and develop and discuss with the authorities our proposals for progress. The results of the analysis and monitoring will be made public through the information campaign.

Territory of activity: Zakarpattia and Lviv regions of the Carpathian region of Ukraine

Goal: to find out the causes of the "garbage crisis" in Zakarpattia region, make them public and discuss with the regional authorities clear steps to address it through analysis and monitoring of national policies and regional strategies on solid waste, information campaign in the media and a round table »With the involvement of all stakeholders.

Results:

Goal 1: to conduct research and analytical work: to collect and analyze all documents related to the national solid waste policy, regional solid waste strategies and their implementation.

Goal 2: evaluate and make recommendations to the authorities.

Goal 3: discuss the provisions of the analytical document at a public round table with the participation of all stakeholders - representatives of regional authorities, local communities, deputies of the regional council, journalists, environmentalists. Publicity of the "round table" will be provided through a video broadcast of the event online on FB and recording of speeches on the channel of the NGO "Ecosphere" on YouTube.

Goal 4: to widely inform the society of Zakarpattia region about the problem of solid waste, attempts of regional authorities to solve it and proposed ways for the effectiveness of this process, the progress of the project and the main provisions of the analytical document developed as a result of analytical work.

The information campaign will consist of work with the media, publications on its own information pecypcax (websites, social media pages, YouTube channels), as well as a visit to Lviv for enterprises and organizations in the field of waste management.

Target audience of the project: employees of the Department of Ecology and Natural Resources and employees of the Department of Investment and Infrastructure of the Transcarpathian Regional State Administration, territorial communities, deputies of the Zakarpattia Regional Council, residents of the region.

Short-term results:

1. An analytical document (policy paper) was prepared and published based on the results of the conducted analytical research
2. Pre-trial proceedings were conducted in Lviv against enterprises and organizations in the field of waste management
3. An information campaign was conducted in the regional 3MI: 10 articles and press releases, 4 video reports on the channel of the NGO "Ecosphere" on Youtube, 30 posts on the organization's Facebook page and Instagram, information on the organization's website
4. A "round table" was held with the involvement of ycx stakeholders through Zoom with the provision of video broadcast on the page of the NGO "Ecosphere" on the FB network and on the channel

Long-term results:

1. Transcarpathian public opinion on state policy in the field of waste management and priority of zero waste model and sorting of solid waste is formed
2. Intensified work of territorial communities on the organization of centralized collection, removal and sorting of garbage on the territory of communities
3. Intensified work of territorial communities and ix associations on construction of waste management infrastructure, in particular construction of sorting lines and waste processing plants on the territory of communities.

Results:

1. In November 2021, as part of the project, we visited the largest recycling station in the region. Thanks to the company's activities, tons of household waste go to recycling, rather than ending up in landfills. How it works and why it is so important to change people's minds [told on our website](#).
2. In December 2021, as part of the project, we visited the mini-sorting shop at the condominium in Uzhgorod, which was created by a resident of the house Ksenia Shokina in July 2020. For all time on delivery of secondary raw materials earned almost 3 thousand UAH, which was spent on improving the area near the entrance. This not only saves money needed for the removal of general waste, but also reduces the amount of waste in the environment. More about such an environmental initiative [read on our website](#).



On December 17, 2021, the NGO "Ecosphera" [organized](#) of the press for representatives of the Zakarpattia media to Lviv to get acquainted with the practice of conscious waste management. How to implement the principles of zero waste in the city and what ideas are possible to implement in Zakarpattia.

You can learn more about the trip in these materials:

<https://www.facebook.com/ekosphaera.ua/posts/2982441922070421>

<https://www.facebook.com/zerowastelviv/posts/4891051217625181>

<http://sevlush.info/topnews/pryklad-dlia-zakarpattia-iak-bezvidkhodni-tekhnohii-vtiliuiutsia-u-lvovi.html?fbclid=IwAR28dRMu-O8EODifyinTvHicFvPbg0nhwaQMAMyBXtGyj4IkPgYJCi85VQ0>

<https://prozahid.com/hroshi-pid-nohamy-abo-iak-sortuvannia-smittia-prynosyt-ekonomichni-vyhody-dosvid-lvova/?fbclid=IwAR1NZaxHwnwRintFhNuh0fDRJFeyVXmfpgJplweEv6HyJzHHApb5hJGXhos>

3. An analytical document (policy paper) based on the results of the analytical study is currently being prepared for publication. We also published the first video report on the situation with landfills in Transcarpathia and the analysis of the Waste Management Strategy for a 15-year period (which has existed since 2013). NGO "Ecosphere" constantly informs the public about this problem and the results of our project.

You can watch the video [on our YouTube channel](#)

We are grateful to all those who support our activities and report on the funds received and spent during 2021.



