

NEWSLETTER

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ENERGY AND BIOMASS

CONTENT



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SUN Dă-I Fest brought together green technology and good music in the heart of Chisinau



Green technologies and good music were the stars of SUN Dă-I Fest Festival, which took place on 10 of June in the Public Garden Stefan cel Mare. The good mood was fueled by many competitions and exhibitions for children and adults. Reaching its sixth edition, the Sun Dă-I Fest is organized by the Moldova Energy and Biomass Project – funded by the European Union and implemented by the United Nations Development Programme –, Energy Efficiency Agency and Ministry of Economy and Infrastructure. The festival culminated the EU Sustainable Energy Week in the R. Moldova that took place during 4 to 10 June.

"I am happy to be attending for the first time the SUN Dă-I Fest, in my position of EU Ambassador to the Republic of Moldova. The EU is supporting the 6th edition of this event, which is a fun day out for the family and offers the possibility to learn about renewable and sustainable energy. With the events offered for the

public, we would like to raise awareness on the positive impact that clean energy can have on people's day to day lives," mentioned Ambassador Peter Michalko, Head of EU Delegation to the Republic of Moldova.

Visitors from Chisinau and throughout Moldova attended this year's edition of the festival. Adults participated in interactive contests and practical workshops on green energy generation and waste processing, and children had fun and learned the secrets of renewable energy.

"It is truly impressive to see here the exhibited green technologies, which found their place on the local market. I am very happy to see people's increased interest for clean energy and its smart consumption. Sun, wind, water, and biomass are safe energy sources that help us keep the Planet clean. It helps us to produce own energy in our country," said Inga Podoroghin, Programme Specialist at UNDP Moldova.



Many producers of clean energy-based technology, who showed in real time how the photovoltaic panels, solar collectors, biomass boilers, geothermal pumps, etc. work, attended the event.

"I am confident that Sun Dă-I Fest is one of the innovative and successful instruments to teach people about smart energy consumption. This festival seeks to communicate how to change the consumption of energy resources into a more rational, efficient and sustainable usage for country's economy", said Alexandru Ciudin, director of the Energy Efficiency Agency.

Youngsters from schools and universities organized an exhibition of eco inventions based on solar, wind, biomass or hydro energy. The wind turbine built from recyclable materials that generates electricity, parabolic antennas lined with mirrors that can be an alternative to stoves, automated smart homes, lower energy consumption elevator, equipment to produce methane gas from organic substances, bus station powered by photovoltaic panels are only few inventions displayed by pupils and students at SUN DĂ-I Fest.

Vadim Griciuc, master candidate of the Technical University of Moldova, presented at the event a model of





a city's housing district, equipped with intelligent solutions for power distribution. "We used photovoltaic panels that follow the sun, wind turbines that produce electricity, energy-saving sources that allow us to store, and then to sell the excess energy. At the same time, we have a smart lighting system. This is a solution that allows us not only to save energy, but also to generate income from selling energy."

SUN Dă-I Fest engaged children in interactive activities. Youngest visitors learned how to make masks and toys from recyclable materials, participated in painting and drawing contests, and sports activities, including the straw bales maze race. Both children and adults took part several fun scientific experiments and learned how to save energy at home and in public places. Car lovers could enjoy a ride in the park in a solar energy powered vehicle.

The Festival hosted an exhibition of popular craft-people who displayed decorative objects, jewelry, and paintings created with natural materials. Some of them conducted outdoor courses for 'hand-made' lovers. Food lovers could enjoy eco and traditional food at the food market, organized by the Festival.

SUN Dă-I Fest ended with a live concert powered by solar energy, which hosted such bands as: Alex Calan-

cea Band & RUPT, The Glimpse, Flash Blood, Dandies, Delta pe Obraz, and Tamala.

The event's partners are the Consumer Protection and Market Surveillance Agency, Termoelectrica, Efes Vitanta, Compass, GSS Security, Youth.md.

Media general partners: TV8, www.999.md

Media partners: Moldova 1, Radio Studentus, Diez, All Moldova, My Business.

The Moldova Energy and Biomass Project, II phase is a project implemented in 2015–2018, with a total budget of EURO 9.41 million provided by the European Union and is implemented by the United Nations Development Programme. It is a continuation of the first phase of the project (2011–2014) that had a total budget of EURO 14.56 million provided by the European Union (EURO 14 million) and UNDP (EURO 560,000). The national partner of the Biomass and Energy Project is the Ministry of Economy and Infrastructure.

More information on Energy and Biomass Project can be accessed on www.biomasa.md and Facebook page [Energie din Biomasa](#).

[Photo gallery is available here.](#)



Moldovan–Romanian Biomass Energy Cooperation



A Memorandum of Cooperation in the field of Biomass Energy was signed on 7 of June in Chisinau between the Biomass Energy Cluster of the Republic of Moldova and Green Energy Innovative Biomass Cluster of Romania during the EU Sustainable Energy Week. The event is part of the economic mission of streamlining the biomass energy carried out by a group of Romanian entrepreneurs in the Republic of Moldova.

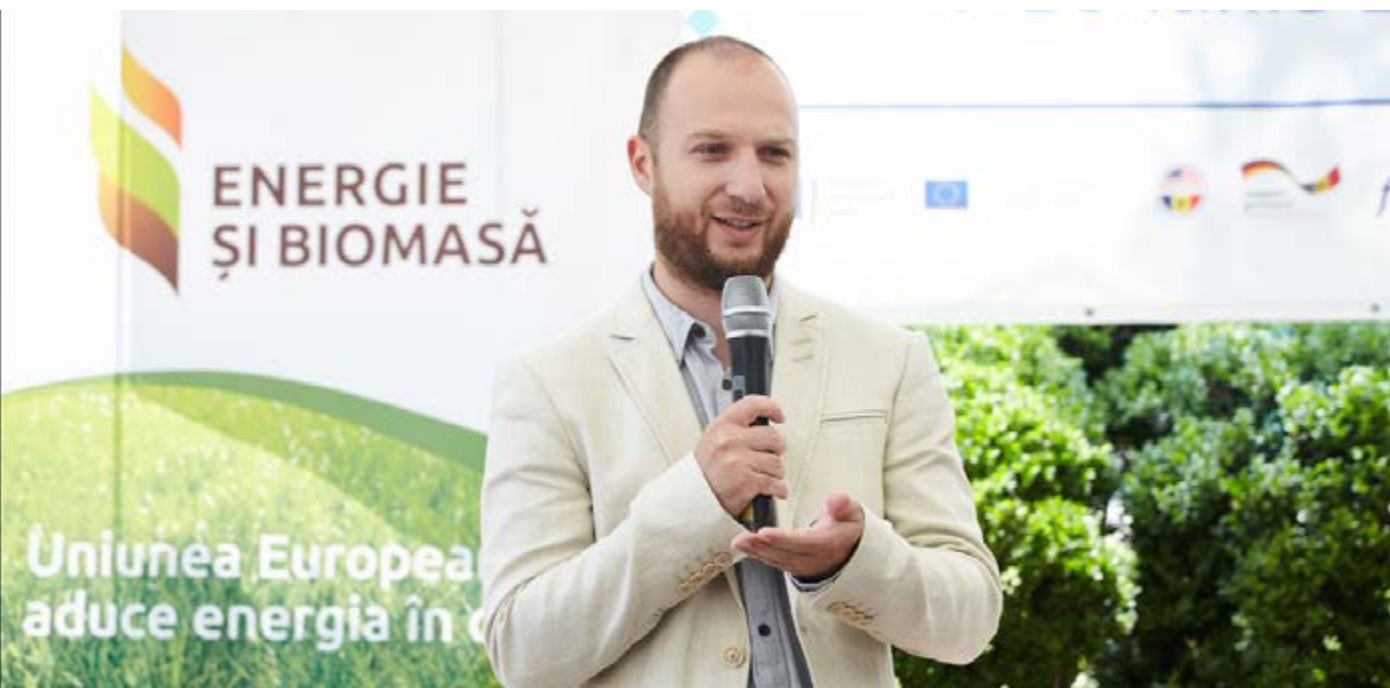
"Biomass subject is very important to Eastern European states, including to the Republic of Moldova. Cluster cooperation opens new doors for the implementation of new interregional projects such as "InterReg Danube", which can stimulate the development of biomass energy sector", observed Lajos Vajda, President of Green Energy Cluster of Romania.

The Memorandum defines key fields and forms of cooperation between both entities, and aims at promoting biomass energy and enhancing efforts in

fighting climate change. The document was developed with the assistance provided under EaPlus Programme.

"The Cooperation platform for key stakeholders with biomass energy-related activities established according to the Romanian Cluster model is an efficient form of cooperation that takes roots in Moldova", said Vladimir Brăgaru, President of Biomass Energy Cluster.

Biomass Energy Cluster of Moldova was created in 2017 based on Romanian model, with the assistance of Energy and Biomass Project funded by the European Union and implemented by the UNDP. The structure represents a platform for discussions and biomass cooperation and has more than 20 members: private companies, public authorities, research institutions, universities, active associations in green energy sector, etc. The platform is based on expertise of Romanian Cluster, which provided necessary support: training, exchange of experience and study visits.



Green Energy Innovative Biomass Cluster of Romania was founded in February 2011 and has 37 members who cooperate and exchange experience in the field of innovation and research. Besides businesses, the Romanian Cluster includes local public administration, universities, consultancy companies and institutions that can contribute to production and capitalization of biomass as renewable energy source.

The economic mission of Romanian entrepreneurs takes places from 6 to 8 June. It is attended by entrepreneurs specialized in biomass generation, renewable energy producers, companies that carry out

biomass-related activities, as well as representatives of other organizations that want to transfer the know-how and exchange the experience to develop common projects. Besides signing the Memorandum between these two entities from Romania and Moldova, the event included meetings with representatives of local authorities and discussions to initiate common projects, workshops, study visits to biomass projects in Chisinau region as well as business meetings with companies from the Republic of Moldova.

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The EU4Energy Initiative covers all EU support to improve energy supply, security and connectivity, as well as to promote energy efficiency and the use of renewables in the Eastern Partner countries Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine. It does this by financing projects and programmes that help to reform energy markets and to reduce national energy dependence and consumption. Over the longer term, this makes energy

supply more reliable, transparent and affordable, thus reducing energy poverty and energy bills for both citizens and the private sector. More information on: www.EU4Energy.eu



World Environment Day – more and more popular in Chisinau



Energy and Biomass Project took part on the Environment Day, organised in Chisinau on 2 of June.

The program with resting in hammocks, music on vinyl records selected by DJ Gonzo, exhibitions, making clay pots and decorations from recyclable objects, balancing on a rope, tourism workshops, excursions to the Botanical Garden greenhouses, yard sale with natural products, concert of Via Daca band gathered over 2000 people in the Botanical Garden.

The World Environment Day related festival was organized by the energy & climate change related projects implemented by the United Nations Development Programme (UNDP) in partnership with the Ministry of Agriculture, Regional Development and Environment, Association of Environment and Ecological Tourism

Journalists, Botanical Garden and Public Association "Ecospectru".

The most suggestive drawings about nature of children thorough Moldova were exhibited and awarded during this event, as part of the contest "Nature via Children's Eyes", organized by the Botanical Garden.

The host of this event has also organized guided excursions to its greenhouses – less accessible spaces for visitors during ordinary days, with species of plants from the tropical and subtropical areas of the Earth. During the tourism workshops organized by the Ecological Movement in Moldova, the participants learned how to equip a touristic rest stop, how to install a tent, and about sanitation rules. The visitors of the Moldova Energy and Biomass Project learned how to assess



the quality of the biofuel and tested their knowledge on the green energy subjects.

A high level of popularity was registered as well for the clay pot making workshops guided by the craftsmen Stoica Alena and Simion, as well as the "Red Rooster" workshop organized together with Vasiluta Vasilache for making decorations and toys from used plastic materials, and "Hai Moldova" Association has recycled T-shirts which were transformed into bags.

At its turn, the "Life Tree" Association organized an eco-quest, an installation with exhibits from waste and representation of the number of years needed for the respective waste to get decomposed.

Fun lovers had the possibility to balance on a rope, to fight on a field with stacks of minced paper and to dance. Those who preferred more intimacy have walked around the Botanical Garden, listened to good music in hammocks and on the carpets from the picnic area.

Dj Gonzo has chosen for the Environment Day an elevated repertory - jazz, funk and electronics, and the evening has culminated in a concert with Via Daca band, known for their "Paparuda" song. It is a band loved by the environment supporters, which combined folk and mythology.

The World Environment Day is celebrated annually on the 5th of June. The topic for 2018 is "Beat Plastic Pollution" and the slogan of the event organized in Chisinau was "Inform Yourself, Love, and Live!"



Journalists from the Eastern Partnership countries discover Moldova's experience in the transition to biomass energy



12 journalists from Ukraine, Belarus, Armenia, Georgia and Azerbaijan visited the Republic of Moldova to learn about the results of the Energy and Biomass Project, funded by the European Union and implemented by the United Nations Development Programme. The visit took place in the framework of the EU4Energy initiative.

For two days, the team of journalists visited several beneficiaries and partners of the Energy and Biomass Project. The "Povestea" kindergarten in the town of Nisporeni is one of the places visited by the journalists.

The 270 children at the „Povestea” kindergarten have hot water thanks to the solar panels installed from European funds of the Energy and Biomass Project. During the winter, the entire surface of the kindergarten, of over 2,500 m², is heated with green energy produced in the Republic of Moldova.

For the heating of the rooms, the kindergarten administration, together with the city hall, buy pellets produced in Moldova, and the money for the consumed energy remains in the country.

The journalists also had an exchange of information with the representatives of the communities in the Nisporeni district part of the Public Private Partnership service.

Another destination point was the briquette production line in the city of Balti. Ludmila Abramciuc and Ivan Damaschin are beneficiaries of the Energy and Biomass Project Leasing Program thanks to which they were able to buy and repay in installments the necessary equipment for biofuel production.

The journalists also attended a lesson on renewable energy at the school in the village of Chiscareni,



Sangerei district. Along with the students of the "Nicolae Casso" school, they answered questions on the green energy sector, but also made a parabolic solar collector. In this, professor Nicolae Spanu guided the team. To be reminded, that the students of the school in Chiscareni are among the winners of the Moldova Eco-energetica Competition, several editions.

The school in Chiscareni village is the first public institution in the Republic of Moldova that has switched to biomass heating. In 2005, thanks to a project funded by the World Bank, a biomass power plant using straw bales was installed at the school. The institution continues to benefit from clean energy.

Meanwhile, the community has connected other public institutions to green energy. The kindergarten in the village has electricity from photovoltaic panels and hot water from solar collectors. Next winter, the city hall will replace the stoves with a biomass heating system, installed from European funds of the Energy and Biomass Project.

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Best youth eco innovations were awarded at national level



... an old parabolic antenna, a printer or CDs, transformed in equipment which produce green energy

Tens of teenagers passionate about renewables participated in the National Contest of Eco Innovations during 11-12 May, in Chisinau. The contest was organized by the Ministry of Education, Culture and Research in partnership with Moldova Energy and Biomass Project, funded by the European Union and implemented by the United Nations Development Programme. The pupils "conspired" with the sun, biomass, water and wind to create inventions based on the power of green energy and which could exempt us of paying our energy bills. Most devices were built from recyclable materials.

The futuristic house built by a group of pupils from Costesti

Pupils from Costesti high school, Ialoveni district, presented a prototype of a futuristic house – 100% ecological. The house is connected to two wind turbines and several photovoltaic panels. The authors of the project say that people who would live in such a house would forget about the bills and would make some extra money from selling the excess of produced energy.

"The solar panels are rotating as the sunflower, capturing the solar radiation and transforming it into energy. The wind turbines use the wind energy to produce electrical energy", describes one of the authors of the project, Dumitru Borta, school-pupil in grade VI.

The entire construction is made of materials available in any household – pieces of plastic, wood, metal, and leftovers of building materials.



And even if the energy produced by the toy house is sufficient to charge their mobiles, pupils are confident that their invention will be used at a larger scale in the future. Ion Mereacre, pupil in grade VIII, hopes that the entire village will start gradually to use the renewable energy sources to heat the houses and have electricity. "We hope that the adults will follow our example and implement our ideas in practice", says the young man.

The interest of Costesti pupils for renewable energy sources was born when a new optional course Renewable Energy Sources was included in the school curriculum, where they can learn how to valorize natural energy resources and how to efficiently use the heat and the light and to protect the environment.

Another participant in the contest – Cristina Bivol, pupil in grade VII, presented 2 turbines to the jury – a wind one and a hydraulic turbine. She built them in her free time using available materials: stands from an old printer, two defective CDs, one plastic box, two magnets and other simple elements. "The wind turbine is on vertical axis which is different from classical turbines but which captures easily the power of wind. My construction powers one small light bulb but I hope it will become an inspiration for those who want to build a larger construction with higher energy capacity", says the adolescent.



From the beginning of the academic year, Cristina has started renewable energy class together with her older peers. "I was fascinated to be able to produce solar, wind, water energy and I asked the professors to enroll me. The renewable energy is our chance to save the planet and each one has to think what he or she can do about it", says the girl.

Parabolic antenna which produces electricity

Andrei Lupascu, pupil in grade IX at High school "Constantin Stere" of Soroca, presented the invention developed with other colleagues – a device that captures solar energy and transforms it into electrical energy. To build their invention, the children used an old parabolic antenna, pieces of wood, metal elements from old toys and other things that were given a second life. "The petrol resources will dry out soon. Besides, it is important for people to generate energy without harming the environment", believes Andrei. He and his colleagues know exactly how to use their invention – in regions where it is difficult to connect to electrical grid, for instance, cabins or constructions in open field, without access to the grid. The model suggested by the pupils of Soroca can generate sufficient energy for a couple of light bulbs but they are confident that, if built at a larger scale, it can be very useful to people who look for cost-efficient and green solutions.



Beer tins generate heat in a house

Mariana and Maxim Mereacre, siblings living in Costesti, Ialoveni, proved to the juries that ordinary boxes, beer tins and water may generate heat in a house, if connected to solar energy. The construction looks like a small oven and is designed to capture solar radiation and to heat the air in one room. "These tins are everywhere, and as a rule, end up as garbage. Our idea would be a solution for recycling this waste", claim the team.

As other pupils who advanced to the national phase of the contest "Renewable Energy Sources", Mariana and Maxim Mereacre will receive participation tickets to the

Summer Camp ENERGEL, 2018 edition, where they can share ideas with other pupils interested in renewable energy resources.

Pupils from 26 schools took part in the final phase of the contest

"In total, 57 pupils from 26 schools took part in the final phase of the "Renewable Energy Sources" contest. The finalists were selected following local/district competition. The schools connected to biomass heating systems funded with European funds of the Moldova Biomass and Energy Project were eligible for the contest, as well as pupils of grades 7-9 who study the



optional discipline "Renewable Energy Sources", says Tatiana Craciun, Community Mobilization Specialist, Moldova Energy and Biomass Project.

The winners of national contest were selected by a Jury consisting of representatives of Ministry of Education,

Culture and Research, Energy Efficiency Agency, Biomass and Energy Project and social initiative "Hai, Moldova". Among the winners of 2018 National Contest "Renewable Energy Sources" are:

Category	Name	Institution	Prize
Grand prize	Ion Mereacre, Ion Rusu	"Costesti" High School, Ialoveni	MDL 1.400
I st place	Andrei Lupasco, Andreea Ranga	"Constantin Stere" High School, Soroca town	MDL 1.200
II nd place (3 winners)	Mariana and Maxim Mereacre	"Olimp" High School, Costesti, Ialoveni	MDL 1.000
	Constantin Cazacu, Dumitrita Harabagiu	"D. Matcovschi" High School, Cotiujenii Mici village, Sangerei district	MDL 1.000
	Vasile Ursu Nicolae Chilianu	"L.M. Vornicesu" High School, Lozova village, Straseni district	MDL 1.000

According to Mariana Goras, Deputy Head of General Education Division within the Ministry of Education, Culture and Research, the contest aims to promote best energy projects using renewable energy sources. *"We are very pleased that this year edition showed again creativity and special skills in designing and presenting innovative ideas in the field of renewable energy sources"*.

The Contest "Renewable Energy Sources" is at its second edition and was organized by the Ministry of Education, Culture and Research in partnership with the Moldova Energy and Biomass Project.

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Photo gallery is available [here](#).

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The opinions expressed in this publication do not necessarily reflect the views of the European Union and UNDP.

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